

Together towards 0 electrocutions and arc flash incidents

We already take a great many measures to prevent electrocution and/or arc flash incidents, yet dangerous situations still often occur and result in accidents all too frequently. And when things go wrong, they go very wrong. Whether you deal with the dangers of electricity to a greater or lesser degree varies.

For example, you may work on electrical installations, be engaged in construction work, perform groundwork or use (electric) hand tools. The important thing is that you always take the right steps so you can work safely. For this, follow the frameworks within your industry and company. Take measures based on the Occupational Hygiene Strategy (AHS) and justify your choices in the Project Risk Inventory & Evaluation (Project RI&E).



We are experts in electrical engineering

NEN 3140 & NEN 3840 (request from your employer or from NEN Connect)



We sometimes encounter unexpected electricity in our work

If you are not an expert in electrical engineering but nonetheless encounter electrical hazards unexpectedly, **always involve your supervisor and/or an expert!**



Do you work on the network of an energy company?

These have additional rules for working safely with electricity. For this, please refer to the BEI-BLS and BEI-BHS.

You can find these at www.beiviag.nl.

1: Get your preparation right

Set up a work plan (BEI) and/or consult the correct regulations or work regulations.

Also organize a designation policy and provide written instructions. Beyond this, organize information and training to be provided, and make arrangements with the Installation Manager (IV'er).

2: Determine the risk

Ask the client to set out the site and project-specific electrical hazards. Supplement the electrical hazards and/or risks of an arc flash. Check that the correct post-completion and other drawings/data are available, and that the installation has been properly maintained. Agree on the work procedure and completion of the job. If necessary, organize a work plan and/or switching sheet (schakelbrief) and agreements in relation to safe switching on and off of the installation and/or parts thereof.

3: Do a Last Minute Risk Analysis (LMRA)

Check that the assignment is clear and the workplace is safe. Is this not the case? Then do not carry out the assignment. Discuss with the Work Supervisor (WV'er) why you cannot perform the work.

4: Take personal measures

Wear the correct PPE during the switching operation(s), measuring moments and/or when positioning the earthing and short circuiting kit. Ask the Work Supervisor (WV'er) what PPE is needed if you don't know yourself. Don't forget arc flash-resistant clothing. Also ensure that PPE and tools are inspected and/or visually checked before use.

5: Prepare de-energized work

Work according to the 'safe five' from the NEN3140/ NEN3840 in order to work without voltage:

- Separate fully (switch free).
- Secure against reconnection.
- Check that the electrical installation is de-energized.
- Ensure earthing and short circuit.
- Protection of nearby, active parts.

Electrical work that falls under the NEN 3140 (and/or NEN 3840) must at all times be carried out without voltage, in accordance with Article 3.5, paragraph 5 of the Working Conditions Decree. Deviation from this is usually a violation of the Working Conditions Decree; however, it may sometimes be necessary. This requires that a very urgent need be demonstrated by the Installation Manager and the Work Supervisor. This live work should only be performed by an authorized, additionally designated, employee.

6: Perform the work without voltage

Always perform the work without voltage. This is required by law. Finally, demonstrate through measurements that the installation is safe again and ready to be switched back on.

7: Turn the system back on

Has the work been completed? Remove all safeguards in reverse order of how you installed them, and only then turn the system back on.

Want to know more? Go to www.elektrischegevaren.nl.