

SURVIVAL TIPS

Suggestions to keep you healthy and free of injury

Using portable electric tools

When using these tools it is easy to focus on the task and forget that you are exposed to voltages with the potential to kill.

Tip 1: Check you are safely earthed

If a fault allows current leakage, electricity will flow to the earth along the path of least resistance. Unless the tool is properly earthed, that path will probably be you!

Tip 2: Use a Residual Current Device

Unless you are working inside in dry conditions, you must have protection from an RCD. Ensure there is one in the switchboard or that you are using one as part of the extension lead. A portable RCD needs to be tested every day before it is first used by pressing the test button. Don't use electrical equipment when your hands are wet or any part of you is touching water. If you must work in wet or damp areas, please use an RCD - it is vital to your survival!

Tip 3: Choose the correct safe tool

Cutting tools such as circular saws and angle grinders can be extremely hazardous to the unskilled, and tools for drilling and cleaning (eg buffers and wire wheels) can cause serious injury due to high torque and rotation that can cause tool to run away from the operator. Does the guard cover half the disc between the operator and the disc? Does the grinder have an automatic

cut-off or "deadman" switch as part of the handgrip, cutting off the power as soon as finger pressure is released? Ensure tool bits are sharp, as blunt edges are hazardous.

Tip 4: Are you competent to use it?

If you have not been trained ensure that your supervisor knows you need help. Examples: when drilling a small piece of steel it will need to be clamped - if it is not it may rotate and cut your fingers. With angle grinders watch out for kickback, where the disc is thrust away from the object it is grinding, which can result in severe cuts to hands, arms, head, torso and legs. Discs can shatter or explode.

Tip 5: Pre-flight check

Before you start up the tool, ask yourself:

- a) Can I spot any defects? Sparking, overheating or signs of burning should be reported immediately, as should faulty electrical outlets, wiring, damaged cords and plugs.
- b) Is the tool in good condition and tagged as tested within the last 12 months by a qualified person. (Note: SiteSafe requires portable electrical tools on construction sites to be tested at three month intervals).
- c) Have you planned a safe system of work for the task?

Tip 6: Don't misuse the tool

Don't kink, cut or crush any electrical cord and never

carry tools by their cord.

Don't overstrain equipment - let the tool do the work. If you use too much force the drill bit, disc, or cutting tool may break causing you to overbalance and fall.

Service equipment regularly and repair or replace as needed.

Make sure the power switch is off before plugging in equipment, and be sure to start and end with switch in 'off' position.

When you are finished, turn the equipment off at the main switch before unplugging it to protect yourself and the next user.

Always disconnect power for inspections, servicing or changing accessories.

Tip 7: Wear appropriate protection

Depending on the tool you are using, protective equipment might include eye protection (wide vision goggles, or safety glasses and a faceshield), hearing protection, safety boots with steel toe-caps, overalls or other close-fitting clothing, and close-fitting gloves that allow a good grip of the tool.

Disclaimer: these survival tips are general in nature and are not intended to be comprehensive. Always take into account your own particular circumstances. If you have any questions, please discuss them with your supervisor.

This issue's survival tips supplied by the New Zealand Safety Council, www.safetycouncil.org.nz