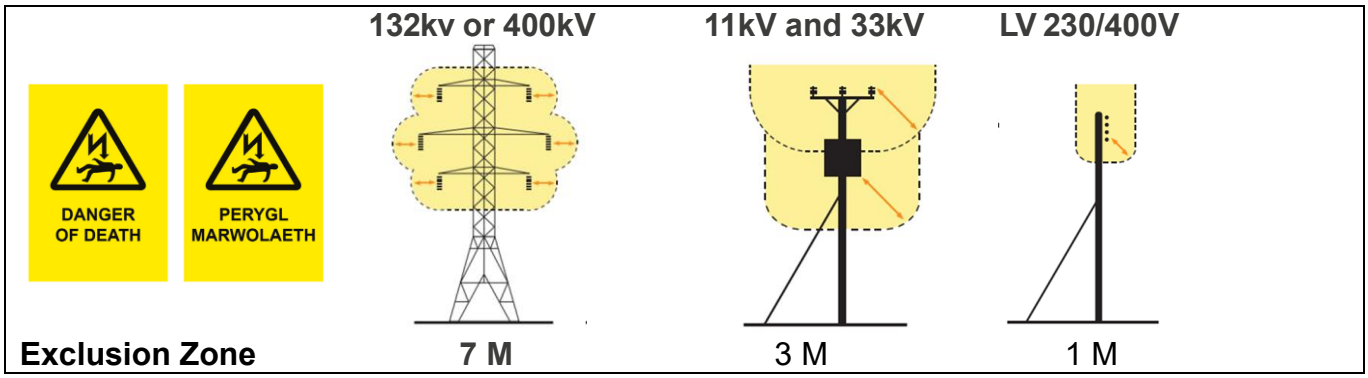
Use of window cleaning equipment near overhead powerlines

Window Cleaner's Safety

Electricity Distribution Network Operators (DNOs) and Transmission Network Operators (TNOs) would like to remind all window cleaners of the potential risks when it comes to working near Overhead Powerlines (OHPLs).
Extra vigilance, care and concentration are needed when using water-fed poles, ladders or scaffolding near OHPLs on domestic or commercial properties.

You must always Look Up, Look Out and stay safe.



Before you start any work, stop and look up.

- Be aware of the dangers of working near or underneath OHPLs. Always assume they are live and beware that electricity can jump gaps. Plan ahead and note the location of OHPLs.
- Consider your position at ground and the extent of your equipment (i.e. Telescopic devices) and ensure that when extended it will not encroach or breach the exclusion zone as a minimum. **Generally remain 5 metres away to be safe.**
- If you are in any doubt about whether the lines in question are power or telephone (this is a very common mistake) – always assume that they are power lines and are live.
- If you are working at night, or in conditions of poor visibility, you should use spotlights or a torch to carefully check that there are no OHPLs if you are doing any work or operating something where there is a risk that contact could be made with OHPLS.
- It is not normally practical for electricity companies to shroud high voltage conductors and even when low voltage conductors are shrouded, the shrouding is not designed to protect against contact by Tools or Equipment – again, **Keep your Distance!**
- If unsure, always contact your local electricity network operators and follow the advice given before starting work.

In the event of an emergency

- If someone or something has made contact with an overhead line, you should immediately clear the area, away from the damage, do not make contact with anything that could still be touching or very close to the electrical equipment and keep at least 5 meters away.
- In an emergency dial ***999*** and **call 105** and tell them electricity is involved.

Electrical Injuries: Types, Risks, and Prevention Toolbox Talk

The 4 Main Types of Electrical Injury

There are four main types of electrical injuries that can occur due to electricity.
In this toolbox talk, we will go over each type of injury and give you help for how to prevent them.

1) **Electricity Can Cause Burns**

The first major injury caused by electricity is burns. Burns can be caused by electrical short circuits, when an electrical arc occurs heat is produced and can cause surface or deep tissue burns depending on the amount of energy released. Burns can also occur when electric current passes through the body. The current heats up body tissue and causes external and internal burns. To prevent any of these scenarios from happening, you need to avoid any contact with live electricity. Here are some good tips:

- Make sure all extension and power cords are in good condition before using them. If they are damaged, throw them out and replace.
- Only qualified electricians should work with electrical equipment that has been made safe.
- Stay away from high-voltage equipment, it should be clearly marked with 'Danger of death' signs.
- Keep water away from electricity conductors.
- If you think someone is in contact with live conductors, do not touch them, check out the advice at the end of this leaflet.

2) Electric Shock

The next type of electrical injury is electric shock which occurs when you come into contact with an electrical energy source. When you get an electric shock, it can burn you and give you anything from a mild jolt to more serious jolts that in some cases can be life-threatening. Electric shocks most commonly occur when working with faulty electrical tools and machinery as well as coming into contact with faulty power cords or exposed conductors on overhead power lines. To avoid electric shocks, it is important to:

- Make sure when using equipment and machinery that they are in good working order. Pay special attention to ensure there are no exposed wires due to cracked insulation.
- If electrical equipment is damaged or broken do not go near it. Report it to someone who can fix it.
- It is also important to ensure you do not use electrical tools and equipment close to water.

3) Electrocution

Electrocution means death by electric shock. Electrocution occurs when the current flowing through the body passes through the heart and causes it to stop beating properly. This can occur at low levels of current.

- Stay a safe distance away from overhead power lines as any contact can cause electrocution.
- Only qualified electricians should work with wiring and carry out jobs involving electricity. They need to ensure that they use the correct fuses, circuit breakers, and wiring when they are carrying out installations and repairs.
- If there is any risk at all in coming into contact with electricity, STOP what you are doing and get advice.

4) Electricity Can Cause Falls

The final major cause of injury due to electrical issues is when people fall due to electric shock when working at height. For example, if you are up a ladder working on something, and you get an electric

shock, you can lose your balance and fall, which turns a minor shock into a serious workplace injury. To avoid this happening, make sure that you:

- Stay clear of electrical equipment when working up high and particularly where there are overhead power lines. Before commencing work, try to find a safer way to do the job.
- Before you use any equipment when high up, make sure that it is in perfect working condition.
- Ensure you are using the safest ladder or scaffolding for the job.

Key Takeaways

When Using Water Fed, Manual Extension Poles, and Portable Ladders for Any Work at Height

- Before starting any work, first "Look out – Look up". i.e. conduct risk assessments through Looking out for any overhead electrical assets located nearby to your work and looking up to where you will be putting the pole / Ladder and check the immediate vicinity for any overhead electrical assets (lines, wires, cables etc).
- Make sure that extension poles cannot fall onto electrical conductors if they become unstable.
- Do not assume any overhead wires are telephone wires/lines/cables.
- Do not Mistake overhead power lines on wooden poles for telephone wires.
- Look out for overhead mains electric cables.
- Look carefully for electrical wires from the house to garages, sheds, and other types of adjacent buildings.
- If in doubt avoid working with or around electrical hazards.
- Think about the weather, Rain.
- Wet hands and wet feet make it easier for a person to conduct electricity.
- High winds can cause the pole to move sideways possibly contacting adjacent overhead electrical wires.
- Work should only be completed by people who have the appropriate training, certification and experience.

Gutter Cleaning with Carbon Fibre Poles

In addition to the above advice for water fed and manual poles the following should always be followed.

- Always try to use 110 volts or battery power for the gutter VAC
- Make sure equipment and extension cords you are working with or around are in good condition and safely out of the way when working.
- Never join extension leads together.
- Always use a residual circuit device if using 230v and push the 'test' button to make sure it works, it could save your life.
- Check all electrical wires to the machine for breakages before use.

Reference for additional information

- https://www.hse.gov.uk/pubns/gs6.pdf
- https://www.energynetworks.org/newsroom/big-brother-star-urges-you-to-look-out-look-up-this-bank-holiday-weekend

Reference to images (the images shown are from an authorised source)

Note: If you believe you have more appropriate images that would make the guidance more interactive and engaging for your staff, feel free to incorporate them as needed.