# Building or working near power lines, poles or cables?

## Distances and steps to stay safe

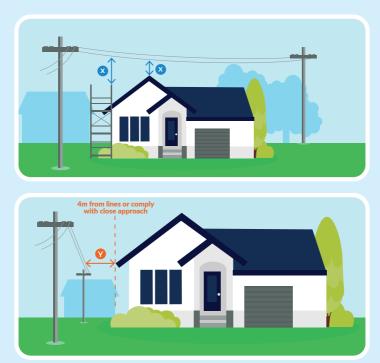
Whether you're a property developer, architect, surveyor, builder, scaffolder, roofer – or even a homeowner putting up a fence, sign, a marquee or laying a driveway – it's vital that you know how to work safely near power lines, poles and cables.

This includes knowing how far away you need to work and build from electricity infrastructure.





#### **Power poles and lines**



# Building and excavation work includes, but is not limited to, the following and can be either permanent or temporary:

- » Houses/buildings
- » Using scaffolding
- » Portable buildings and marquees
- » Building fences

- » Digging/laying a driveway
- » Raising ground levels
- » Erecting signs
- » Artificial shelter belts and canopies

To ensure all work is carried out a safe distance away from power poles and overhead lines, please refer to the table on the next page for the minimum distances that apply at points 'X' and 'Y' in the diagrams above.

Ensure structures such as garages and any house/garage extensions or new buildings/ structures remain well clear of power poles and lines as set down in the table.

The minimum safe distances differ depending on the voltage of the power lines. If you're unsure of the power line voltage please call us.

If you need to build closer to overhead lines, please call us before you start construction to work through options such as asset relocation or engineering reports.

#### Table of minimum distances

(as specified by NZECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances)

	Minimum distance beneath powerlines X	Minimum distance to the side of powerlines Y
Not exceeding 1 kV (max span length 50m)	4.0m	3.5m
Exceeding 1 kV but not exceeding 11 kV (max span length 80m)	5.5m	5.0m
Exceeding 11 kV but not exceeding 33 kV (max span length 125m)	7.0m	8.5m

Follow the 4 metre rule. All work activity below power lines must be at least 4 metres away from the lowest line/s. If you need to work closer than this, you must apply for a Close Approach Consent by calling us before commencing work activity.



Do not dig within 5 metres of one of our power poles without a Close Approach Consent.

Excavations within 5 metres could cause the pole to collapse. We will provide guidance and this might be on-site in some instances.

Note: materials excavated and deposited become the new point of measurement to line.

### **Underground cables**

Half of WEL's network is located underground. To keep safe and avoid damage to underground power, you should check the location of underground electricity cables before starting any project that will involve excavation or digging into the ground – find out more at www.beforeUdig.co.nz.

This will also avoid damage to other underground services that may be located in the project area such as gas, water and telecommunications, and most importantly, ensure the safety of the people working on your project.

- » Mechanical excavators and power tools should not be used within 2 metres of our cables.
- » If you are planning to dig within 2 metres of a cable, or if your work may cause a cable to be unsupported for more than 2 metres of its length, please call us to apply for a Close Approach Consent before commencing work activity.



What to do if you hit a power pole, line or cable:

- » If in a vehicle or heavy machine, stay inside it.
- » However, if you're at serious risk of another hazard such as fire, then jump well clear DO NOT touch the vehicle/machine and the ground at the same time.
- » Call WEL immediately on 0800 800 935 to report the incident and wait for help to arrive.

If you come across such an incident DO NOT approach. Call WEL immediately, and if anyone is injured, call 111.

# **Knowing about NZECP 34**

The New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34) is an electrical code of practice that must be complied with. Its purpose is to protect people, property, vehicles and mobile plant from the risk of electrocution, serious injury and expensive damages or remedial works.

Confirming compliance with NZECP 34 in the early stages of your planning is a must to ensure work near electricity distribution assets can be done safely and to avoid any disruption to your plans or additional costs, such as changing architectural plans or relocating overhead power lines later.

Note: an approved resource or building consent does not necessarily mean compliance with NZECP 34.

For more information: www.worksafe.govt.nz



Call us on 0800 800 935 wel.co.nz