



Trees and Safety

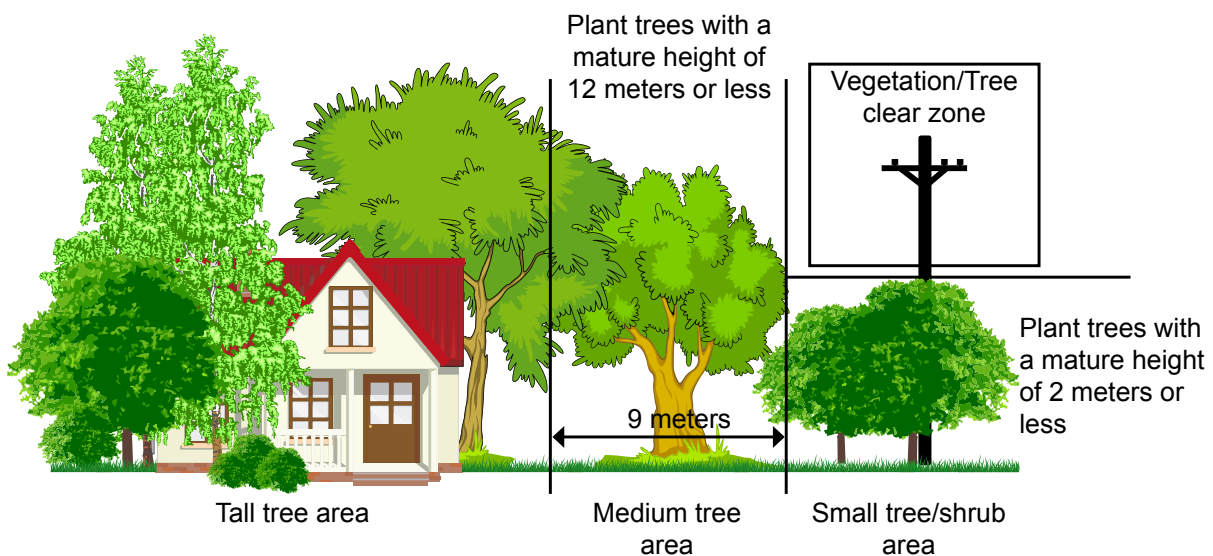
- If a tree branch breaks off and lands on a power line, call us immediately on 0800 808 587. Do not touch the branch or wire
- Don't cut down trees or branches near power lines or within falling distance of power lines and structures.
- Stay clear of power lines when removing any object caught in a tree
- Never let your ladder touch a power line
- Power lines are not insulated. If you touch a power line, you will be severely injured or killed. Always assume a power line is energised (live) and dangerous
- Make sure children do not climb trees that are anywhere near overhead power lines

Trees - Think before you plant - Look up

- Before you plant a tree, look up to see if it will grow too close to overhead power lines as it matures

Ask questions when you are purchasing a tree:

- What is the height when fully grown?
- What is the spread when fully grown?
- What is the growth rate – trees have different growth rates depending on their geographic location and weather conditions



Examples of trees:-

Trees – Small to 5 metres

- Dog Wood varieties
- Callistemon – Bottle Brush
- Rhododendron
- Japanese Maple
- Flaxes
- Magnolia trees
- Picea Formosa
- Hebes
- Fraxinus Suspense

Trees – Medium – up to 10 metres

- Manuka or Kanuka
- Pitosporum
- Pseudopanax – 5 Finger – Lancewoods
- Kowhai
- Acacia – trees
- Pinus - Monophylla /or Mugo

Trees – Large over 15 metres

- Totara
- Native Pines – Rimu/Miro/ Kahikatea/Matai
- Macrocarpa
- Oaks
- Beech – Native or European
- Elm
- Pines – various

If you plan to plant near power lines, consider low-growing species (up to 4m maximum height).

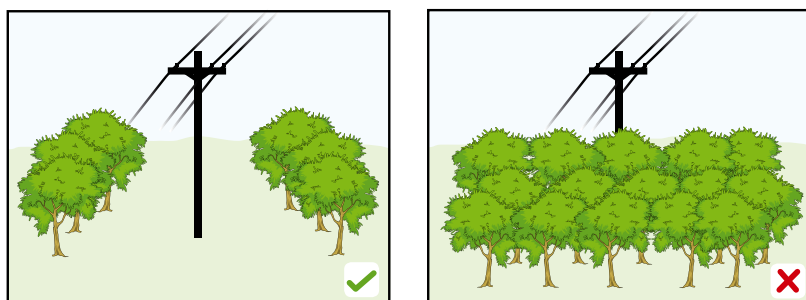
Trees planted directly under lines should not exceed 2m in height.

If establishing commercial forestry near lines, PowerNet can help calculate practical planting distances from the line. Early planning will avoid trees having to be trimmed or removed prior to maturity later on.

Where trees have been removed, you can stop regrowth or sprouting by applying environmentally-friendly herbicides to the stumps. It may then be possible to plant other 'power line-friendly' shrubs in their place.

We recommend you contact your local nursery for advice.

In all cases, it is very important to check the mature growth height of trees and shrubs before planting.



Distances for spans less than and equal to 150 metres in length

Voltage of conductors other than aerial bundled conductors or conductors insulated by other means	Distance in any direction from any point on conductor (metres)
66kV or greater	4
50kV or 66kV	3
33kV	2.5
11kV	1.6
400/230 v	0.5
Any voltage where the conductor is an aerial bundled conductor (HBC) or is otherwise insulated	0.5
Key: kV = kilovolts v = volts	

Distances for spans greater than 150m

Span Length	150-300m	300-500m	500-750m	Over 750m
Vertical clearance (metres)	3.5	4	4	4
Horizontal clearance (metres) first 15% from structure	4	7.5	15	25
Horizontal clearance (metres) centre 70% mid span	8	15	30	50

For further information on vegetation visit our website www.powernet.co.nz and click on Tree Regulations