

Fact Sheet

Concreting private power poles



Maintenance of Private Power Poles

Electricity customers are responsible for the safe maintenance and operation of electrical installations located on their premises. This includes private steel or timber poles which have been set into concrete, including driveways.

The most practical way to check whether a pole is safe, and has not corroded or decayed, is by inspecting its condition below ground.

To do this, a person carrying out the inspection must remove any surrounding concrete or soil to a depth of at least 200mm. Depending on how the pole has been installed, removing the soil or concrete might make the pole unstable, even though its overall condition is sound. Ausgrid's inspectors will not be removing concrete from around private poles.

For these reasons, we recommend that:

- All new power poles are installed so that any concrete stabilisation finishes at least 300mm below ground level. This is a new requirement under the Service and Installation Rules of NSW (Clause 3.7.2.3, note 3).
- Any existing poles with concrete stabilisation that finishes at or about ground level should be inspected by a qualified person. If concrete is removed and reinstated, it should be finished at least 300mm below ground level, wherever possible.

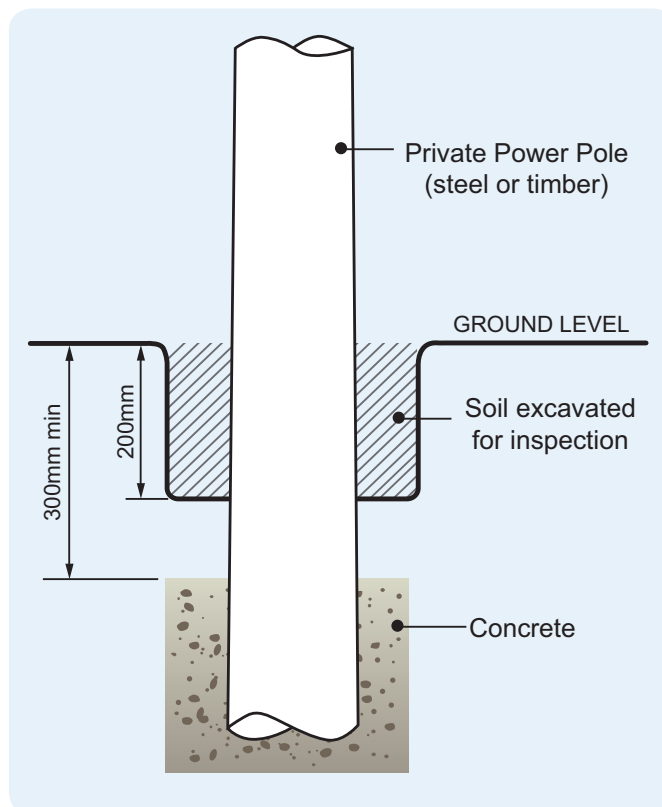
Corrosion of Steel Power Poles

Steel power poles typically corrode where the pole first enters the soil, and to a depth of approximately 200mm below ground, due to the combined effects of oxygen and moisture.

To try to reduce the risk of corrosion, many poles have been set in concrete which finishes above ground level. While this may be effective for a time, it cannot eliminate corrosion, and some poles which appear sound above the concrete may have significantly deteriorated steel embedded inside the concrete. These poles may need to be replaced for safety reasons.

Decay of Timber Power Poles

Timber poles affected by decay may also become unsafe. This decay is most common where the pole first enters the soil and to a depth of approximately 200mm below ground, where sufficient levels of oxygen and moisture are present.



Preferred installation.

Setting a timber pole in concrete can increase the rate of deterioration as the concrete tends to retain moisture which allows decay to flourish. Over time, it is possible for the pole to appear sound above the concrete but for there to be insufficient sound timber embedded inside the concrete, making the pole unsafe.

Timber poles are also vulnerable to termites, which can significantly affect the integrity of a pole in a relatively short period of time.

Note

This fact sheet provides a general overview of issues associated with the decay and corrosion of private power poles set in concrete, for the information of our customers. It is not intended to describe every situation or address individual issues which may lead to different results.