Construction Supplies

Version 2011.1

Construction Supplies can be installed using the minimum requirements of AS/NZS 3000:2007, (Wiring Rules) and AS/NZS 3012:2010, (Construction and Demolition sites) or as an alternative, installed in strict compliance with these amended Energy Safe Victoria guidelines.

Energy Safe Victoria (ESV) has produced these guidelines for Registered Electrical Contractors, Licensed Electrical Inspectors and the suppliers of construction supplies to assist in the provision of the electricity supplies to construction sites.

For the electricity supply to be connected for construction purposes, it is essential that negotiations with the individual electricity Distribution Companies (DBs) are undertaken prior to commencement of any construction or site works. These negotiations should establish the availability of electricity supply and location of the nearest appropriate connection point together with discussing the connection of the permanent supply as soon as practicable.

These requirements are outlined in the current SIRs, including whether the electricity supply is required to be installed overhead or underground. If it is not possible for a builders electricity supply to be installed in the permanent position, the use of a Builders Supply Pole (BSP) could be considered.

It should be noted that BSPs in high bushfire risk areas can only be installed with underground consumer's mains. ***(Overhead supplies are not allowed)***

The DBs must be consulted for advice on the fire hazard categories of the areas as designated by the fire control authority. It is also a responsibility of the REC to negotiate a suitable location for the BSP that considers the site requirements including the service line minimum ground clearance and neighbouring property crossing, and usage when the supply cannot be installed and connected in the permanent position.

Where a construction electricity supply is installed, all mandatory requirements of AS/NZS 3000:2007, (Wiring Rules) and AS/NZS 3012:2003, (Construction and Demolition sites) shall be met.

An example of a typical installation of the BSP is provided that shows the requirements for underground connection in figure 1. Pole, support and overhead connection requirements are shown in figures 2 and 3 additional notes are included with the diagrams for further guidance.

Figure 1 – Typical underground construction supply

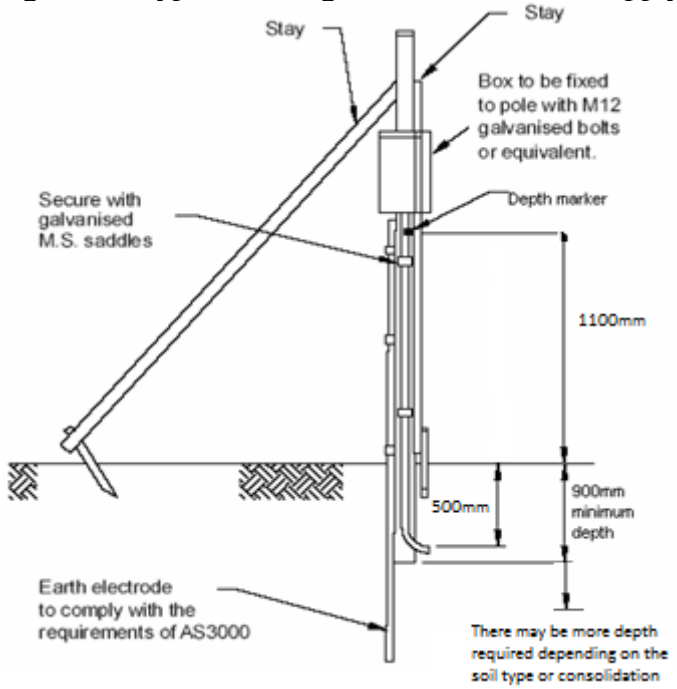


Figure 2 – Typical overhead supply for a 5 metre pole

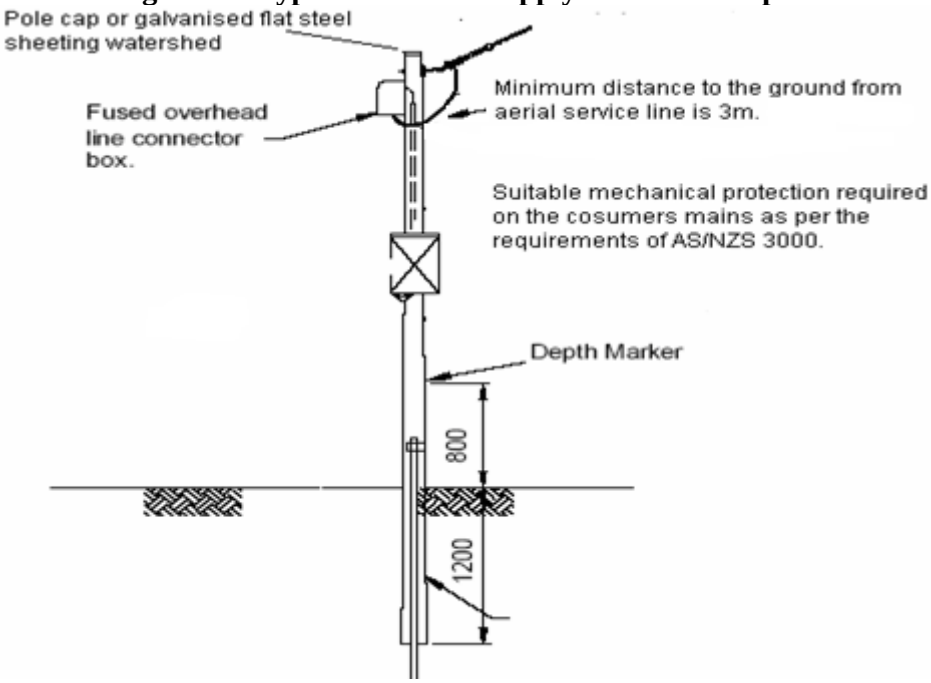


Figure 3 – Typical overhead supply with stays for a 5 metre pole

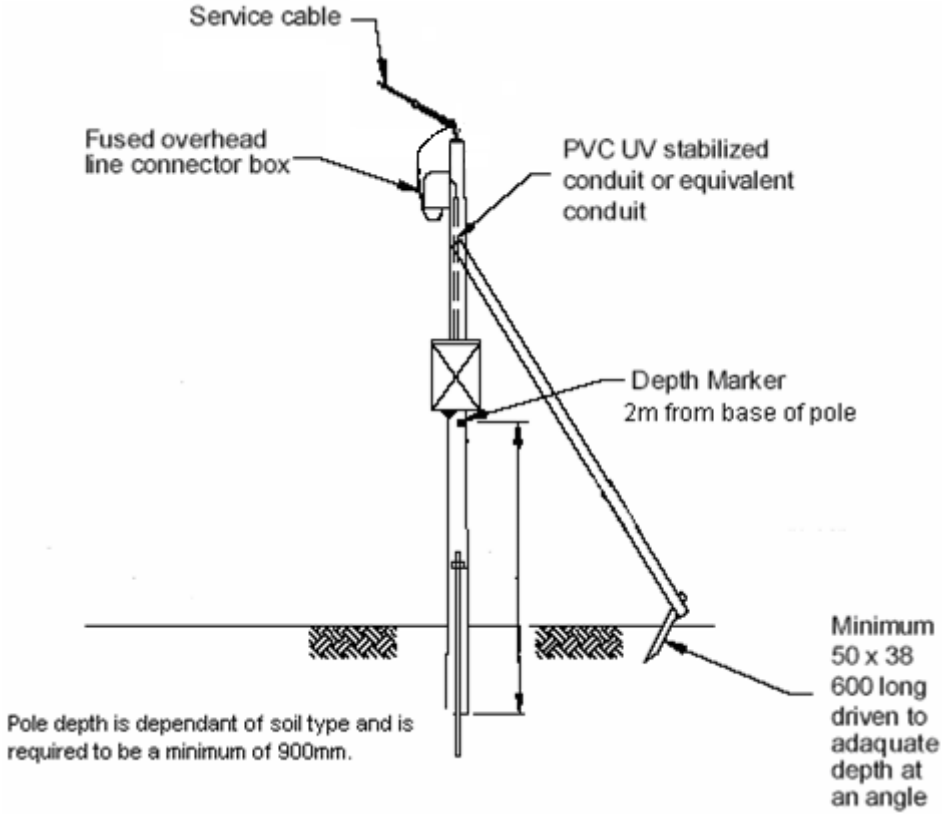
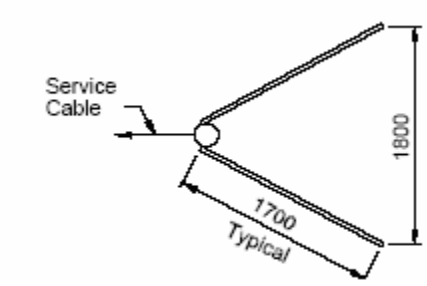


Figure 4 – Typical pole support plan. Stays are to be installed in tension, which is the opposite side of the pole to the pull of the service.



Danger - Safety precautions similar to working near live parts must be taken when installing cables in a service pit containing live cables. Energy safe has recently received several incident reports where workers received a shock.

Notes:

1. Minimum pole size in accordance with AS/NZS 3000, but shall not be less than 150mm diameter for full length preservative treated poles and not be less than 125mm for hardwood poles, with durability of class 1 and strength grade of S3 or better.
2. A minimum of two (2) stays to be a minimum of 75mm x 38mm, 3000mm long and secured to the pole and pegs using a minimum of 2 galvanized coach screws of adequate size at each of the four fixing points.
3. Pegs are to be a minimum of 600mm and driven to a depth of 450mm.
4. A depth marker consisting of a saw cut (minimum length of 100mm), filled by a row of at least three galvanized nails shall be made on the pole at a distance of 2000mm from the base of the pole.

5. Excavated soil **MUST** be compacted around pole in 100mm layers and thoroughly tamped.
6. Main Switch must be located no higher than 2metres from the finished ground level.
7. If poles are longer than the figures shown, then additional depth will be required proportional to the additional length above the ground.
8. Pole caps required on all poles.
9. The size of the Consumers mains to be accordance with the Acts, Regulations, Wiring Rules and the prospective fault current as nominated by the Distribution Company.
10. Earth electrodes are to be installed in accordance with the wiring rules which require that they be driven to a minimum depth of 1.2 metres.