



MGG Guide to Electric Fence Earth systems

An efficient earth is a key factor in the performance of your fence system. The earth is half of the circuit of your electric fence system. The electric current travels from the energiser, along the fence wires, through the animal and through the moisture in the ground back to the energiser to complete the circuit.

The earth must be as conductive as possible to give the animal an effective shock. A minimum of 3 earth rods is recommended. Larger energisers and long fence runs require more rods.

A good rule of thumb is 1-2-3-4

1 wire connecting the rods

2 metre long earth rods

3 earth rods is minimum required

4 metres between the earth rods.

Where to put the earth system

The most effective place for the earth system is in damp, high mineral soil. It must be

- At least 10m from an electrical or telephone earth (the further the better)
- At least 10m from metal pipes carrying domestic or stock water.
- At least 20m from any dairy shed pipe-work.
- Not connected to steel or iron clad buildings
- Protected from machinery and stock damage
- Away from animal urine and manure (corrosion).

Use galvanised earth rods, rusty or corroded rods are not effective. If you mix the metals you may have problems fairly quickly due to electrolysis.

The non-technical version!

With our basic units, SF01 and SF015, it is very likely you will get good results with even one **CLEAN AND NON RUSTY** rod. This should go well into the ground and the earth wire must be firmly attached. (Slipping the ring over the post will not give a reasonable result). Rust is the enemy, electric currents do not flow through rust.

If the fence is not performing well, check;

- Is the tape or string in good condition, knots are a common reason for failure.
- Re-do the earth system.
- Check for leakage. Weeds, spider webs, old standards with poor insulation and wet conditions all drain current.