

GENERIC SPECIFICATION

SPECIFICATION FOR SINGLE ROD AND TRENCH EARTHING (RADIAL EARTHING) INSTALLATIONS UTILIZING LPI[®] RESISTANCE LOWERING COMPOUND

1. General Description

1.1 Installation of a cost effective earthing system which provides low impedance and low resistance earth.

1.2 Components:

Single Rod – Resistance Lowering Compound (LPI RESLO), earth pit and copper earth rod.

Trench – Resistance Lowering Compound (LPI RESLO), earth pit, copper earth rod, copper tape and earth rod clamps.

2. Resistance Lowering Compound (LPI RESLO) Properties

- 2.1 Shall contain a compound which, when mixed with water, solidifies after a period of time and provides:
- 2.1.1 A highly conductive mass, allowing for the efficient dissipation of electrical surges and faults.
 - 2.1.2 A highly conductive mass that is hygroscopic in nature and does not reduce, contract or separate from the accompanying earth electrode.
 - 2.1.3 A highly conductive mass which is not affected by seasonal rains and floods, unlike conventional earthing methods which utilise chemical treatments such as salt.
 - 2.1.4 A highly conductive mass which does not contaminate ground water.
- 2.2 Once applied, the LPI RESLO shall provide for significant improvement in electrical resistance values, with expected improvement of 2 to 15 times.
- 2.3 Unlike salt treatments, the stable compounds of the LPI RESLO shall not be corrosive in nature and will therefore minimise corrosion of the embedded earth electrodes.
- 2.4 Shall require no periodic dosing or replacement treatments.
- 2.5 Shall perform effectively in all soil conditions, even during dry spells.
- 2.6 Greater quantities of LPI RESLO may be required to be applied to sites where excessively high soil resistivity is found.