TECHNICAL DATA SHEET

LPI® Soil Resistance Improvement Material (SRIM PLUS)

Features

- Carbon composite, significantly reduces earth resistance.
- Easy to handle and install.
- Environmentally friendly ingredients and packaging.
- No maintenance required.
- Long shelf life due to unique packaging.
- Independently tested by Australian University and NATA-certified labs to standards EN 12457-2, EN 12506, ISO 14869-1 and ASTM standards G57-06, G59-97 & G102-89.
- Fully compliant with international standard IEC 62561-7 and USA EPA TCLP Test Method 1311.

PRODUCT DESCRIPTION

Ordering Code	SRIMPLUS-20
Product description:	High-performance, standards-compliant earth enhancing compound
Application:	To lower earth electrode resistance and impedance
Electrical resistivity:	Less than 0.1 Ωm (tested to ASTM G57-06)
Weight:	20 kg
Packaging:	LDPE-lined woven polypropylene bag
Pallet quantity:	48 bags per pallet

* MSDS and Test Reports are available on request. Contact LPI for more information.

A low resistance or impedance is an extremely important requirement from the installation of any earthing system. LPI's SRIMPLUS-20 enables the installer of an earthing system to achieve significantly lower resistances than would be the case in native soil, especially in locations where earthing is difficult due to high soil resistivity.

SRIMPLUS-20 is comprised of a specially formulated blend of environmentally friendly earthing compounds combined with tailored, high-performance additives, resulting in excellent electrical conductivity and corrosion performance. When SRIMPLUS-20 is mixed with water and poured around and between the earth electrodes and surrounding soil, the mixture of ingredients and water react to form a hardened, concrete-like encasement of the earth electrodes. SRIMPLUS-20 will not wash away in wet seasonal conditions, providing a permanent solution and hence maintaining an effective earthing system. ,→ **Product Application Guide**

SRIMPLUS-20 is easy to apply. In summary:

- For a trench installation, SRIMPLUS-20 is poured below, around and over the radial electrode. The trench is then backfilled with the original excavated soil if it is of reasonable quality, or good-quality replacement soil.
- For a vertical hole installation, SRIMPLUS-20 is poured into the hole around the earth rod until the hole is completely filled.

For more details, please consult the detailed Installation Instructions supplied with SRIMPLUS-20.

The approximate amount of SRIMPLUS-20 required is shown in the tables below.

RECOMMENDED NUMBER OF BAGS OF SRIMPLUS-20 REQUIRED FOR BACKFILLING A TRENCH (RADIAL) INSTALLATION (300 MM WIDTH*)

Radial Electrode Length (m)	No. of bags of SRIMPLUS-20
5	1
10	2

* For different trench dimensions, please contact LPI or an authorised distributor for further advice or interpolate / extrapolate from the quantities shown. Alternatively, the LPI Earthing Calculator can be used (see below).

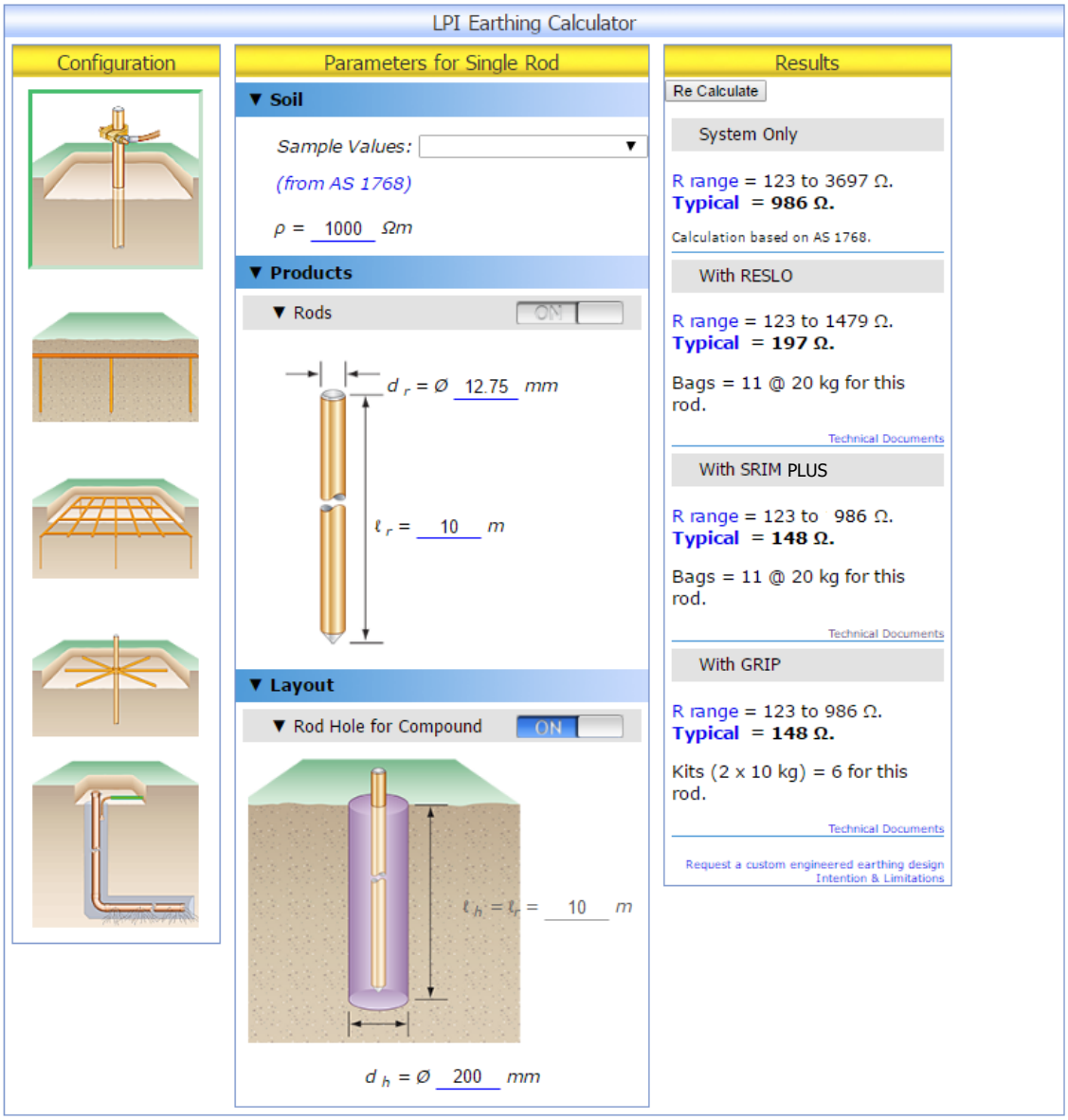
RECOMMENDED NUMBER OF BAGS OF SRIMPLUS-20 REQUIRED FOR BACKFILLING A VERTICAL HOLE (EARTH ROD) INSTALLATION

Hole Diameter (mm)	Depth = 1.8 m	Depth = 2.4 m	Depth = 3 m
75	0.5 bags	0.5 bags	0.5 bags
125	1 bag	1 bag	1.5 bags
175	1.5 bags	2 bags	2.5 bags

* For different hole dimensions, please contact LPI or an authorised distributor for further advice or interpolate / extrapolate from the quantities shown. Alternatively, the LPI Earthing Calculator can be used (see below).

Earthing Calculator

LPI offers a comprehensive, user-friendly, online Earthing Calculator which allows the user to estimate individual electrode or standard earth grid resistances based on IEEE and other international earthing and grounding standards. Go to https://lpi.com.au/services/earthing-calculator/.



Working left to right, select the configuration of the electrode / earth grid, then edit the dimensions and other parameters. Results are given for the theoretical best-case scenario (as per the standard) as well as likely real-world values as typically seen in long-term term field tests with LPI compounds.