

The logo features the letters 'sme' in a bold, lowercase, sans-serif font. The 's' and 'm' are yellow, while the 'e' is black. The letters are contained within a black circle.

# Lightning Protection and Earthing

EST 1985



Lightning Protection

Earthing

Surge Protection

**SABS**  
ISO 9001



[www.sme.co.za](http://www.sme.co.za)

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The logo for SME (South African Society of Engineers) is displayed in a black circle on a yellow background.

**SME**

## The Importance of Lightning Protection

Due to a difference in electrical charges, electrical energy will flow from one place to another during thunderstorms. The flow of energy is shown as a lightning flash which generally only lasts 0.00001 seconds but can reach temperatures of up to 30,000°C which is five times hotter than the surface of the Sun.

There are no devices or methods capable of modifying the natural weather phenomena to the extent that they can prevent lightning discharges completely. Lightning flashes to, or nearby, structures (or electrical lines connected to the structures) are hazardous to people, to the structures themselves, their contents and installations as well as the electrical lines.

This is why the application of lightning protection measures is essential. The need for protection, the economic benefits of installing protection measures and the selection of adequate protection measures should be determined in terms of risk management.

## The Preferred Lightning Protection Specialists

SME Lightning Protection and Earthing has been a SABS ISO certified company for over 30 years and achieved a new level of quality recognition in the industry by becoming the first industry specialist to be certified according to relevant ISO 9001:2015 Quality Management Standards by the SABS.

This level of certification provides our clients not only with peace of mind and reassurance that they are dealing with a reputable industry specialist but also reflects the quality of our workmanship, our processes and our service levels to our clients

As industry experts our solutions-based quality approach is anchored by the appropriate risk analysis and technical application of the relevant South African National Standards (SANS) across all consulting, installation and maintenance projects.

With a strong client-centric business philosophy and commitment to quality technical protection, SME Lightning Protection and Earthing has secured itself as the preferred industry specialist.



## A Trusted Industry Specialist

### What differentiates SME Lightning Protection and Earthing?

- ⊕ We have established ourselves as industry specialists by providing lightning protection and earthing solutions for more than 35 years.
- ⊕ We have achieved a significant level in Quality Management Standards and have been recognized by the SABS through the ISO 9001:2015 certification.
- ⊕ We have a valued reputation in the industry for a high level of client service, risk-based methodology, technical expertise and operational excellence.
- ⊕ We have an excellent track record on projects in terms of health and safety management.
- ⊕ We provide quality protection solutions to our clients for property, equipment and people with experience across a wide range of industries.
- ⊕ We offer support through our international footprint with operational branches across SA and Namibia and a proven track-record of projects across most Southern African countries.
- ⊕ We provide a complete risk management maintenance support through the industry innovating RMS Partnership program.

### An Experienced track-record

SME has been operating as a specialist company, in the fields of lightning protection, earthing and surge protection since 1985.

With over 35 years of industry experience we have continued to serve our clients through industry leading technical orientation, advanced risk analysis and an exceptional focus on service, delivering industry leading quality protection solutions to our clients.

With an increased International demand for SME's specialised support services and a strong recognised reputation of being highly service orientated, we have diversified our operations into affiliated SME companies to empower the growth of our team and to further expand across Southern African countries including South Africa, Namibia, Mozambique, Botswana, Swaziland, Zambia and Kenya with further country expansion, planned in the future.



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## SPECIALISED SERVICES

SME offers the following specialised services for Lightning Protection, Earthing and Surge Protection

- ⊗ Consulting & Design
- ⊗ Soil Resistivity Surveys
- ⊗ Earth Resistance Testing
- ⊗ Risk Assessments
- ⊗ Supply and Installations
- ⊗ Maintenance and Compliance Support
- ⊗ Earth Grid Design
- ⊗ Plant-wide Audits

## ANCILLARY SERVICES

- ⊗ Underground Services Detection
- ⊗ Excavation Services
- ⊗ Earth Core Drilling

## Experienced in the following Industries

- ⊗ Energy
- ⊗ Telecommunications
- ⊗ Infrastructure
- ⊗ Sugar
- ⊗ Hazardous and explosive sites
- ⊗ Petro-chemical
- ⊗ Mining
- ⊗ Infrastructure
- ⊗ Commercial
- ⊗ Renewable Energies
- ⊗ Pulp
- ⊗ Manufacturing
- ⊗ Medical
- ⊗ Residential
- ⊗ Education and schools

## APPLICABLE STANDARDS

As a SABS-ISO 9001:2015 certified company, all specialist recommendations and protection solutions are based on the applicable South African National Standards (SANS code of practice) which are affiliated with the International IEC codes of practice, applicable to all countries who are committed to International Industry Standards.

- |                            |  |
|----------------------------|--|
| ⊗ <b>SANS 10313:2018</b>   | Protection against lightning - Physical damage to structures and life hazard |
| ⊗ <b>SANS 10199:2016</b>   | The design and installation of an Earth Electrode                            |
| ⊗ <b>SANS 10089:2017</b>   | Electrical Installations and Earthing in Hazardous Areas                     |
| ⊗ <b>SANS 62561:2013</b>   | Lightning Protection System Components                                       |
| ⊗ <b>SANS 62305-1:2011</b> | Protection against lightning   |
| ⊗ <b>SANS 62305-2:2011</b> | Risk Management  |
| ⊗ <b>SANS 62305-3:2011</b> | Physical damage to structures and life hazard                                |
| ⊗ <b>SANS 62305-4:2011</b> | Electrical and electronic systems within structures                          |

### Lightning Protection

### Earthing

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