

Technical Datasheet

Substructure solutions

Item number: ROEF-145-A
HS code: 7308.90.98

Product description

The Substructure solutions are robust, floor-mounted support frames designed for the installation of home energy storage systems. Manufactured from Magnelis® steel for excellent corrosion resistance, the substructure provides a stable and durable base for outdoor and indoor installations.

The design supports clean and organised cable routing via front, rear and side openings, and includes integrated grounding points for equipotential bonding. Lightweight components allow for easy manual positioning, while adjustable leveling feet enable precise alignment on uneven floors. The substructure is intended to support the mounted energy storage system without interfering with its ventilation, safety functions or protection ratings. Installation above ground level helps reduce exposure to water ingress and ground settlement.

General product information

| Part | Contents |
|------------------|--|
| Manufacturer | ROEF BV |
| Production type | Substructure solutions |
| Model | Floor Mounting |
| Artikelnummer(s) | ROEF-145-A |
| One-liner | Robust floor-mounted substructure made of Magnelis® steel, designed for stable installation of home energy storage systems, with integrated grounding points and corrosion protection according to ISO 12944 (C3). |

Technical specifications

| Feature | Specification |
|--------------------------------|---|
| | Model: ROEF-145-A |
| Compatible ESS system | Huawei LUNA2000 (215-2S10 / 215-2S12) |
| Product length | 1749 m m |
| Product width | 1160 m m |
| Product depth | 300 m m |
| Weight | 75 kg |
| Installation time | Approx. 10 minutes (typical installation time) |
| Installation type | Floor-mounted |
| Floor mounting versions | Fixed height / Adjustable height |
| Leveling range | Up to ± 12 mm per foot (adjustable version only) |
| Material | Magnelis® steel (S250GD + ZM310) |
| Material thickness | 1.5 – 2.0 – 3.0 mm (depending on component) |
| Corrosion protection | ISO 12944 – C3 |
| Ingress protection | Design aligned with IP33 requirements (EN 60529) |
| Impact resistance | Robust steel construction designed for mechanical impact resistance up to IK10 level (EN 62262) |
| Maximum static load | Up to 2,800 kg (static) |
| Cable routing – front / rear | Standard front and rear plates with knock-out holes |
| Cable routing – side | Side cable duct up to 300 × 100 mm |
| Grounding | Equipotential bonding via integrated grounding points |
| Intended installation location | Floor-mounted installation on non-combustible substrates |

Standards and safety

| Standard / Guideline | Explanation |
|---------------------------------------|--|
| EN IEC 62485-5/VDE-AR-E 2510-2 | Safety framework and application guideline for stationary energy storage systems up to 1500 V DC – electrical safety, ventilation, gas exhaust and fire/explosion control. |
| EN IEC 60529 (IP33) | Design aligned with IP33 requirements according to EN IEC 60529. |
| EN IEC 62262 (IK10) | Mechanical impact resistance classification (IK code) according to EN IEC 62262. |
| EN ISO 12944-5 | C3 rating suitable for outdoor use in moderately aggressive environments. |
| IEC 60364-4-41/60364-5-54/ EN 62305-3 | Equipotential bonding and earthing principles according to IEC 60364 series. |