



Procedimento di Valutazione Impatto Ambientale ex art. 23 D.Lgs. 152/2006
e Autorizzazione Unica ex art. 12 D.Lgs. 387/2003

Progetto Parco Solare Fotovoltaico
Calapricello
Comune di Taranto (TA)
Fondazione Cabine Elettriche

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REVISIONE	N°	DATA/DATE
Prima Emissione	00	Luglio 2022

5.2.5 Foundation

5.2.5.1 Design of the System with MV Power Station

i Closed electrical operating area

For safety reasons, the system with the MV Power Station must be installed in a closed electrical operating area in accordance with IEC 61936-1.

- Ensure that unauthorized persons have no access to the MV Power Station.
- Only appropriately trained and qualified persons may operate inverters and perform MV switchgear switching operations.

5.2.5.2 Support surface

- The support surface must be a dry and solid foundation, e.g. gravel.
- In areas subject to strong precipitation or high groundwater levels, a drainage system must be implemented.
- Do not mount the MV Power Station into ground depressions to prevent water ingress.
- The support surface underneath the MV Power Station must be clean and firm to avoid any dust circulation.

5.2.5.3 Pea gravel ground

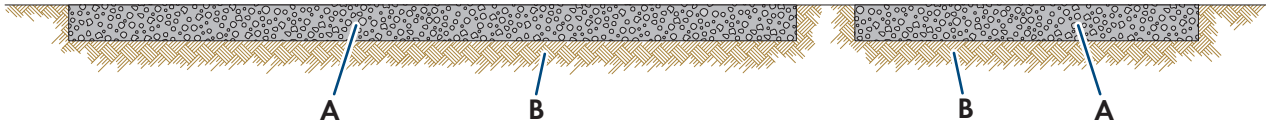


Figure 35: Structure of the support surface

Position	Designation
A	Pea gravel ground
B	Solid ground, e.g. gravel

The subgrade must meet the following minimum requirements:

- The compression ratio of the subgrade must be 98%.
- The soil pressure must be 150 kN/m².
- The unevenness must be less than 1.5%.
- Minimum clearances for servicing operations must be observed (see Section 5.2.2, page 59).
- Access roads and areas must be passable, without any obstructions, for service vehicles (e.g. forklifts).

5.2.5.4 Weight load on the support points

The MV Power Station sits on six support points:

- 4 support points at the outer corner feet
- 2 support points underneath the MV transformer compartment

The installation surfaces must have the following properties:

- The installation surfaces (e.g. strip foundations) must be designed for the weight load of the support points. The weight load on each of the six support points of the MV Power Station is 8000 kg.
- The 30 mm feet underneath the inverter compartments must not be used as support points.

5.2.5.5 Mounting options

The strip foundations must have the following properties:

- The strip foundations must be suitable for the weight of the product.
- The strip foundations must be mounted on solid ground.
- The below-ground depth of the strip foundations must satisfy the structural requirements.
- The protrusion of the outer corner castings and center support points must be taken into consideration. The height difference is 60 mm.
- In case of the order option "Earthquake and Storm Package", additional space is required to attach the side twistlocks. The surface area of the side twistlocks is 100 mm x 100 mm.

The type of mounting foundation is the responsibility of the customer.

Mounting option 1

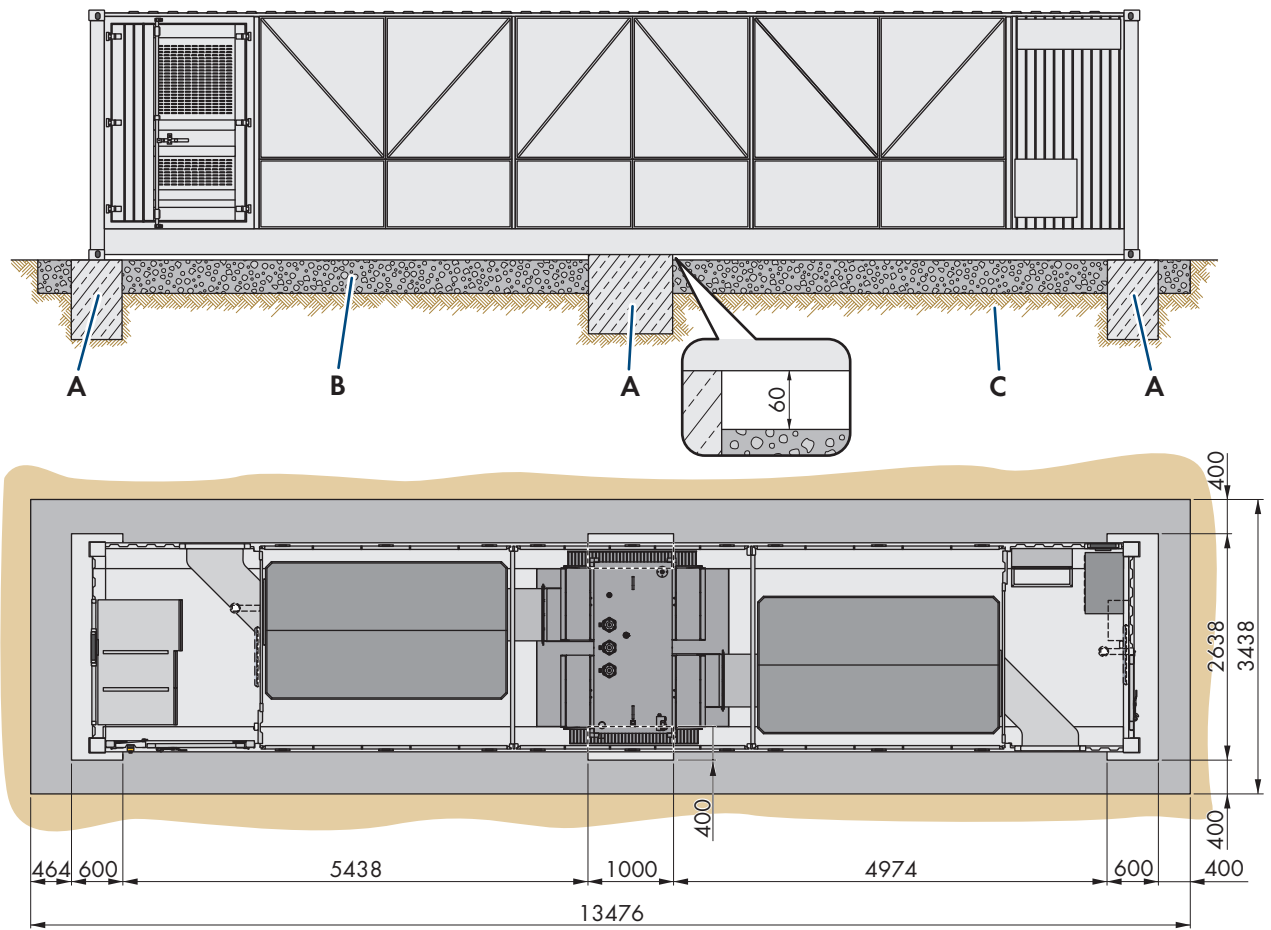


Figure 36: Mounting option 1 (dimensions in mm)

Position	Designation
A	Strip foundation
B	Pea gravel ground
C	Solid ground, e.g. gravel

Mounting option 2

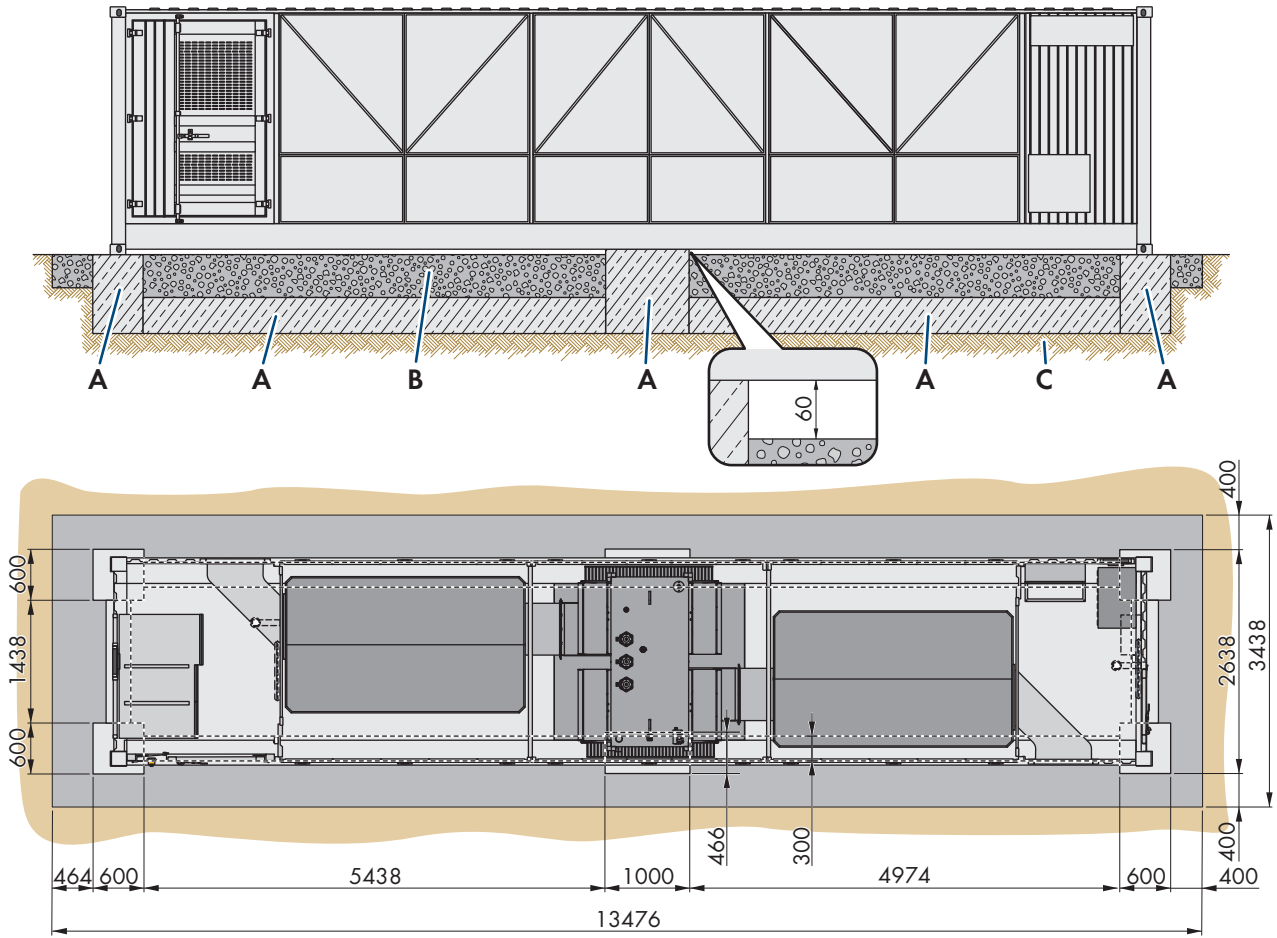


Figure 37: Mounting option 2 (dimensions in mm)

Position	Designation
A	Strip foundation
B	Pea gravel ground
C	Solid ground, e.g. gravel