

Sigma I XL Steel

Significant savings

The next step of the Sigma I XL evolution cleverly combines the advantages of a one-pile system with the cost savings of zinc-magnesium-coated steel beams. Coupled with extensive component pre-assembly and the use of the Clickstone technology, Sigma I XL Steel offers considerable cost savings, especially for large-scale plants. Multiple array configurations ensure an optimized and cost-efficient solution for project specific requirements.

Maximum life span

A fundamental feature of the Sigma I XL Steel is its longevity. The special coating provides effective, self-healing and long-term protection. The higher corrosion resistance compared to more common hot-dip galvanized coatings is guaranteed, providing a maximum life span for system and project.

Excellent adaptability

As a one-pile system, the Sigma I XL Steel is perfectly suited for uneven terrain. Depending on project soil requirements, various footing options are available: driven piles, ground screws, cast in concrete, or foot plates. Due to the twistable connection between rafter and module rail a tilt of up to $\pm 10^\circ$ in East-West direction is allowed. Ramming tolerances and uneven terrain can be compensated vertically and in North-South direction in the field with no fabrication.

Ecologically worthwhile

Both the ramming foundations and the space between modules and ground surface the Sigma I XL Steel avoids sealing and obliteration of the soil. The distance between the piles and the distance between the array to the ground permit good circulation of air and water for healthy soil. The system is fully recyclable and easily to disassemble. Furthermore, the special coating used reduces the amount of zinc leached into the soil by rain.



Open terrain



Framed module



Frameless module



Orientation portrait





Orientation landscape





mounting
systems

Application	Ground mount
PV modules	Framed, frameless
Module layout	Multiple configurations, max. table length 30 m
Module orientation	Portrait, landscape
Module inclination	20°, 25°, 30° and 35° ¹
Ground clearance	80 cm ¹
Ground slope	Transverse inclination up to 10° East/West
Sigma post spacing	Determined by project requirements, local conditions and static calculations
Standards	Eurocode 1 – Actions on structures Eurocode 3 – Measurement and construction for steel construction
Supporting profiles	Steel profiles (Zink-Magnesium-coated, e.g. Acelor Magnelis)
Ramming posts	C-Post (S355) galvanized, size depends on local conditions
Small parts	Module clamps: aluminum (EN AW 6063 T66) and Stainless Steel (V2A) Other: galvanized steel
Bonding	Low-impedance resistance connections between the components reachable without additional components
Warranty	10 years ²

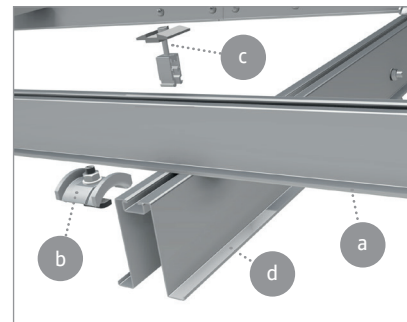
Configuration	Modules	Foundation	Clamping
Sigma I XL Steel 2 portrait	Framed and frameless modules	Suitable for all types	Clickstone-System 
Sigma I XL Steel 3 landscape			Clickstone-System 



Upper adapter rafter



Lower adapter strut



Sigma I XL Steel

- a Module support
- b Module support clamp
- c Module clamp with Clickstone
- d Rafter

¹ Other on request.

² For terms and conditions please refer to the Mounting Systems GmbH warranty.