FS DUO

PRODUCT SHEET

Tried and tested two-post system made of high-strength steel

Minimise installation time with an easy-to-install design

Flexible foundation options

Excellent material efficiency



THE FIRST CHOICE FOR LARGER MODULE AREAS

FS Duo is ideal for large multi-row module tables. Each support has two pile-driven post foundations which are combined with Z-purlins to give a stable and load-bearing PV mounting structure for module arrays with larger spans.



Highly efficient post geometries that are materially cost-effective

ASSEMBLY IN THE SHORTEST POSSIBLE TIME

The design allows quick module installation with either clamps from above or with screws from below. Simpler connections and fewer components further reduce assembly time and effort.

ADAPTABLE TO TOPOGRAPHICAL CONDITIONS

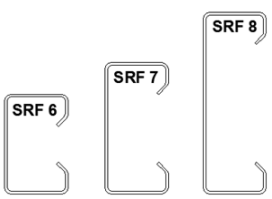
FS Duo is suitable for all terrains and any project-specific adjustments can be easily made by Schletter's in-house engineers.

A geological survey of the subsoil and 3D terrain analysis on site form part of the detailed and individual project planning process.

Load testing on the driven piles and chemical analyses determine the load bearing capacity of the soil to create a soil profile.

Optimal system stability under wind and snow loads is ensured through the selection of galvanised posts from a variety of size classes. The pile-driven posts we develop ensure excellent integration with the ground while maintaining maximum rigidity against bending. When necessary, hybrid solutions are also offered.

The system takes into account all international standards and can withstand any wind and snow loads on site through the optimised design.



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TECHNICAL DETAILS

Scope of application	• Open area system with two pile-driven post foundation supports
Material	• Posts: Steel, Z1200 hot-dip galvanized in accordance with DIN EN ISO 1461 or ZM600 coated in accordance with DIN EN 10346 (depending on soil conditions) • Purlins/trusses: Steel, Z600 hot-dip galvanized in accordance with DIN EN ISO 12944-2 or ZM310 coated in accordance with DIN EN 10346 • Module clamps: Aluminium clamps or screw connections according to customer requirements • Fasteners and screws: Zinc flake coated steel or stainless steel • Project-specific adjustments are possible, based on region and according to local standards
Planning aid	• Project-specfic planning
Structural design	• Individual system calculations based on regional data and guidelines • Structural analysis of the terrain based on an external soil survey • 3D terrain model for foundation design and optimisation (optional) • The load assumptions correspond to DIN EN 1991-1 Parts 3 and 4, DIN EN 1990, DIN EN 1999, DIN EN 1993 the regulations of the national annex (UL 2703, ASCE 07-05, ASCE 07-10, ASCE 07-16, ASCE 07-20) • In-house calculations according to 50 different worldwide standards (Eurocode, US Code, IS, SANS, Australian Standard) with our own globally valid structural analysis software • Verification of all structural components based on FEM calculations or according to an empirical test setup (wind tunnel tests)
Module type	• Framed modules with a frame thickness of 30–50 mm • Module configuration in any orientation and using any size • Options for large-format or bifacial modules • Options for First Solar modules
Module mounting	• Module fastening from above with Rapid clamps (adaptable to any module type) • Module fastening from below with screws (adaptable to any module type) • Integrated grounding of the modules (optional)
Warranty	• 10 years in accordance with our Guarantee Terms and Conditions
Supplementary documents	• FS Duo Assembly Instructions