

# MOUNTING SYSTEMS **GROUND-MOUNTED**



MOUNTING SYSTEMS | GROUND-MOUNTED | SPECIAL SOLUTIONS

# YOUR PARTNER FOR EFFICIENT SOLAR CONCEPTS QUALITY MADE IN KIEL

SOLprime was founded in 2010 as a joint venture between several specialist partners with the aim of offering the solar market efficient products. Since then, our team has combined the know-how and industry experience from metal processing, engineering and renewable energies. SOLprime designs, manufactures and supplies photovoltaic mounting systems for roof-mounted and groundmounted installations in the multi-digit megawatt range.

From the design to the last screw of the mounting frame, you receive everything from one source and a suitable solution for every project. Furthermore, we supply you with complete solutions or custom-made products and provide a customer service you can always rely on.

We are constantly working on adapting and optimising our offers in line with market requirements. Therefore, we can offer our customers much more than just innovative rack technology.

Our mounting systems are subjected to various quality controls. In addition to a check of the statics, an optimisation in the wind tunnel and an FEA are carried out.

Since 2010 we have supplied over **500 megawatts** of ground-mounted and rooftop structures and installed over **600 rooftop systems** for private customers.



#### At home in the north, in use throughout the world!

Wherever the sun shines, there are countless possibilities to use solar power as a sustainable source of energy. PV systems can ensure self-sufficient energy security, also at locations that do not have an electricity grid. SOLprime has already supplied numerous projects worldwide with innovative custom-made products.

You can get an overview of our international projects and references at www.solprime.de.



#### SOLprime mounting systems

System technology with effective application possibilities! Get to know the advantages of the systems and let us convince you of the outstanding quality!

#### Low cost of the material package

Finite Element Analysis (FEA) and wind tunnel analysis as well as sophisticated profile geometries ensure optimal material usage.

# GROUND-MOUNTED SYSTEMS THE SECURE BASIS FOR YOUR PHOTOVOLTAIC SYSTEM

SOLprime mounting technology provides effective options for quick and easy installation of groundmounted photovoltaic systems. The flexible design of the substructure offers solutions for almost all requirements: different module sizes, module arrangemens, table inclinations and ground types.

Our technical solutions for the mounting of PV modules are designed with practicality in mind, are of high quality and can be used in many different ways. We offer a complete range of substructure and fastening elements. Plant designers can quickly and efficiently plan and implement your ground-mounted plant with SOLprime system technology.

We provide sturdy constructions for a long service life as well as innovative system technology that enables simple installation in the shortest possible time. SOLprime mounting systems are internationally renowned because they offer every photovoltaic system the perfect solution for a reliable basis.

If required, we also offer geological investigations to determine the pile-driving depth.

Efficient implementation of ground-mounted systems - with your partner SOLprime.



#### SOLprime advantages:

- Innovative, cost-effective solutions;
- Simple assembly in shortest assembly time;
- Tested quality for high stability and safety;
- Long service life due to high-quality materials;
- Short delivery times and worldwide delivery



#### Simple and fast mounting

The installation of the systems is simple and error-proof, so that even fitters with little previous experience can set up the systems with little training time. The systems have comparatively few components, none of which weighs more than 20 kg. Due to the low individual weight, the components can still be moved easily by hand.

#### **Integrated alignment options**

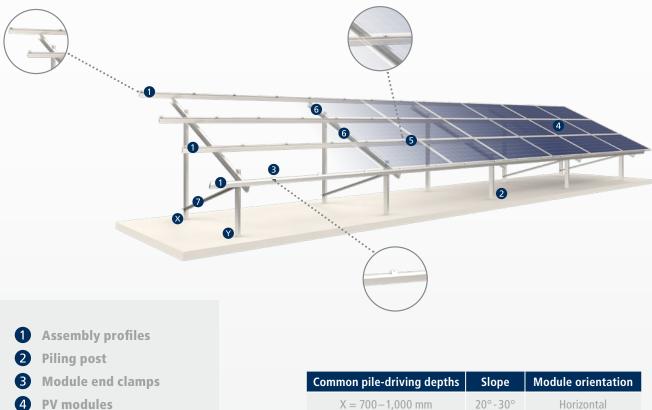
Alignment possibilities in all directions are already provided in the profiles, so that ramming differences can be compensated. Nevertheless, ramming is of central importance, because excessive deviations from the ramming tolerance (alignment +/- 2.5 cm) mean a disturbance of the optimal assembly process. Since all compensation possibilities are already integrated, correction elements are not necessary.

### SOLPRIME MOUNTING SYSTEMS 3x8 RAMPED | BOLTED | FOUNDATION

#### TYPE15R Steel/Aluminium

One of our best sellers is the TYPE 15R system. This widely used system offers a simple and fast assembly with short-term worldwide material delivery times.

The system, which has proven itself over several years, is constantly being adapted to changing markets. The module tilt angle is 20°-30°.



- Module clamping plate 6
- 6 Purlin
- Wind bracing 7

Common pile-driving depths	Slope	Module orientation
X = 700-1,000 mm	20°-30°	Horizontal
Y = 1,200-1,500 mm		

SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality | wind tunnel-optimised

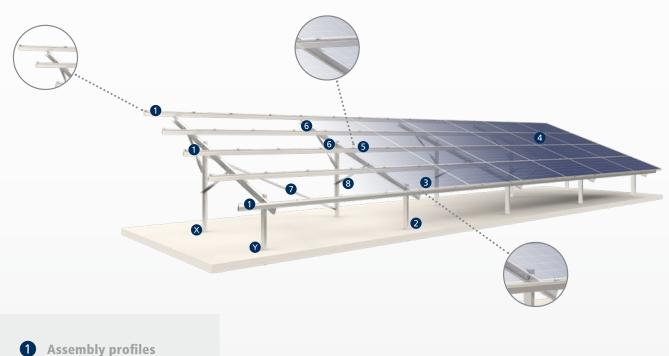




The mounting system **TYPE 15R** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed data

#### TYPE17R Steel/Aluminium

Efficiency even in small spaces! Not least because of the increased number of modules per table, the Type 17R system is very popular. The robust construction offers a space-saving, stable and safe rack system. The module tilt angle is 20°-25°.



- 2 Piling post
- **B** Module end clamps
- 4 PV modules
- **5** Module clamping plate
- 6 Purlin
- **7** Wind bracing
- 8 Wind twisted

Common pile-driving depths	Slope	Module orientation
X = 700-1,000 mm	20°-25°	Horizontal
Y = 1,200-1,500 mm		

SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality | wind tunnel-optimised





The mounting system **TYPE 17R** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed data sheets with the exact quantities and dimensions are at your disposal from the project planning phase onwards.

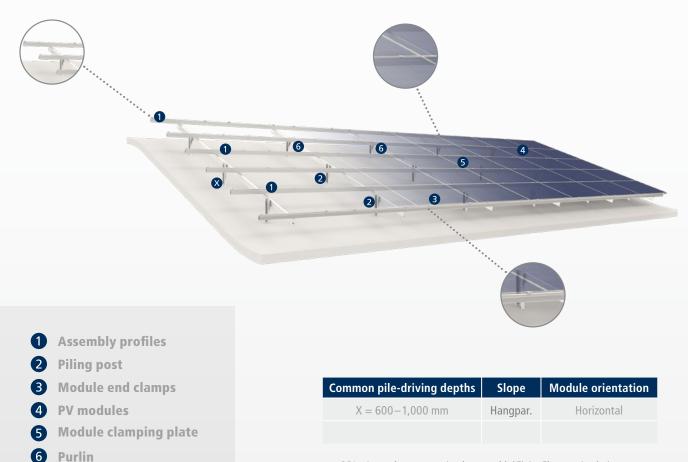
For further information please contact us by e-mail or phone. We are happy to advise you!

SOLPRIME MOUNTING SYSTEMS 5x8 RAMPEDIBOLTED IFOUNDATION

#### TYPE18R Steel/Aluminium

Proven technology and cost-effective solution for slope areas, such as landfills. Here the system adapts to the substrate.

The module inclination angle depends on the respective substrate.



SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality





The mounting system **TYPE 18R** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed data sheets with the exact quantities and dimensions are at your disposal from the project planning phase onwards.

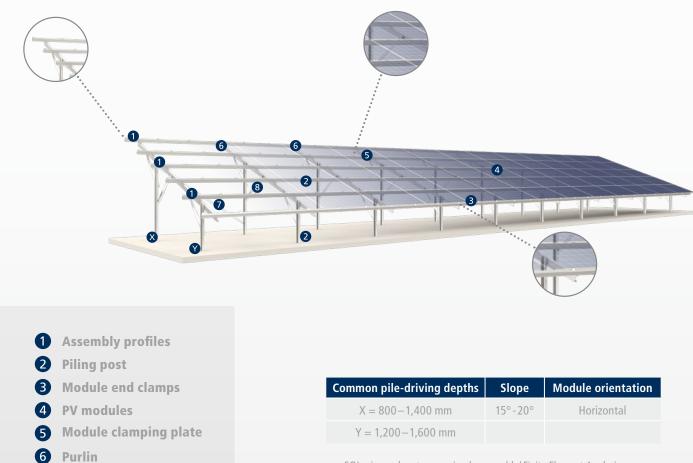


**TYPE** 10R

#### TYPE10R Steel/Aluminium

With up to 70 modules or approx. 115 m<sup>2</sup> module surface with an inclination of 15° to 20°, the system TYPE 10R 5x14 is currently the largest table variant.

On the basis of proven profile geometries, the system offers options for optimum space utilisation.

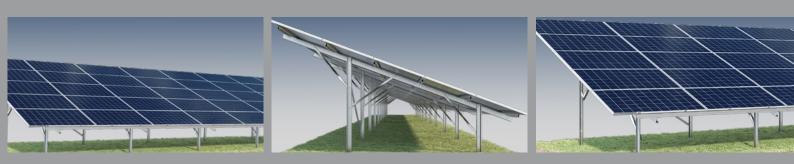


**7** Wind bracing

8 Wind twisted

SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality | wind tunnel-optimised





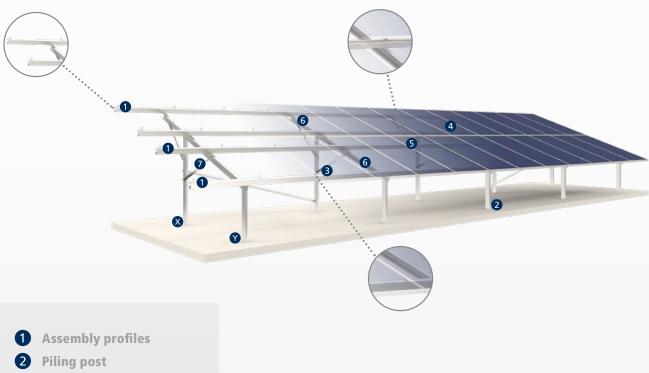
The mounting system **TYPE 10R** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed data sheets with the exact quantities and dimensions are at your disposal from the project planning phase onwards.

For further information please contact us by e-mail or phone. We are happy to advise you!

SOLPRIME MOUNTING SYSTEMS 2x13 RAMPEDIBOLTEDIFOUNDATION

#### TYPE 17R 72C Steel/Steel

New module technology with 72-cell modules and module lengths of approx. 2 m can be placed vertically on tables of the system TYPE 17R 72C. The tried and tested features of the Type 17R system are retained.



- **3** Module end clamps
- **4** PV modules
- **5** Module clamping plate
- 6 Purlin
- **7** Wind bracing

Common pile-driving depths	Slope	Module orientation
X = 700-1,000 mm	20°-25°	Vertical
Y = 1,200 - 1,500  mm		

SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality | wind tunnel-optimised



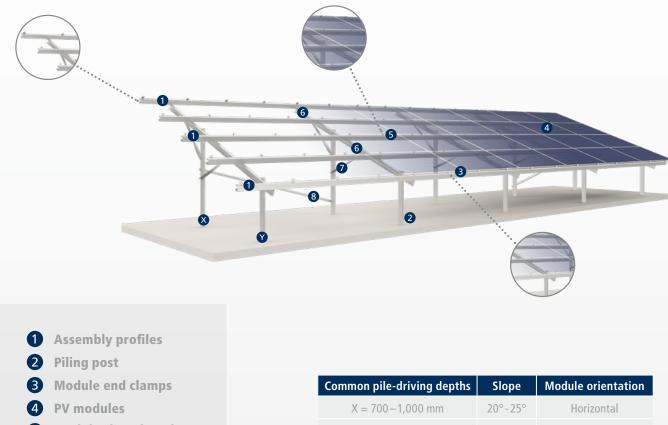


The mounting system **TYPE 17R 72C** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed data sheets with the exact quantities and dimensions are at your disposal from the project planning phase onwards.

#### TYPE 17R MPS Steel/Steel

As an alternative to our steel/aluminium systems, we offer the MPS variant based on our TYPE 17R system. The positive properties of the system are retained.

In addition, this option provides us with alternatives in the event of price fluctuations on the metal markets.



**5** Module clamping plate

- 6 Purlin
- 7 Wind bracing
- 8 Wind twisted

Common plie-ariving depths	Siope	module orientation
X = 700-1,000 mm	20°-25°	Horizontal
Y = 1,200-1,500 mm		

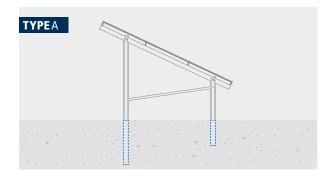
SOLprime advantages: simple assembly | Finite Element Analysis flexible adjustment | tested quality | wind tunnel-optimised

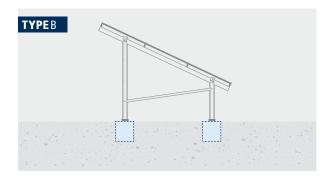


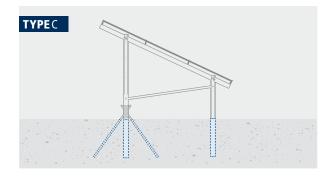


The mounting system **TYPE 17R MPS** is supplied with all necessary mounting profiles, screws, nuts, module clamps etc. Detailed

# FOUNDATION OPTIONS PERFECT STABILITY ENSURES LONG SERVICE LIFE







The SOLprime substructure for ground-mounted systems can be used for all types of ground. Depending on the ground conditions and the resulting pull-out forces, the modules can be mounted either by means of rammed steel posts (type A) or concrete foundations (type B). The root foundation (type C) is used for low ramming depths with low extraction forces.

The tested support design is optimised in the wind tunnel and designed according to a system statics under Eurocode (EN 1993-1-1; EN 1993-1-3; EN 1999-1-1). It can be planned safely and cost-effectively, depending on the location and the report on the static soil properties including a pull-out test. We also provide this service on request.

The modules are fixed on SOLprime mounting profiles with module end clamps "MEK" or module clamping plates "MKP". The mounting profiles lie on cross beams, which are screwed to the piling posts. The piling posts are braced relative to each other with wind struts and tension connectors as required.

In addition to our standards, we manufacture individually according to your specifications and the project-specific conditions. All materials are highly resistant to corrosion and are made of stainless steel, aluminium and galvanised steel.

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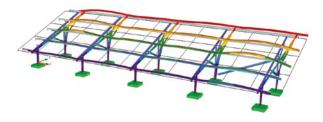
# Our customer consultants support your project

- Preparation of a soil report / pull-out test
- Recommended pile-driving depth
- Location-related static design
- On-site installation instruction
- Complete assembly (measuring, ramming, substructure, modules)



Instagram: @solprimepowersystems Facebook: SOLprime Power Systems





#### Finite Element Analysis (FEA)

Materials in accordance with German quality standards, static testing, FEA and wind tunnel optimisation guarantee the long-term stability of our systems, which we offer on the basis of steel/ aluminium or steel/steel.

During production we attach great importance to quality: Large components are manufactured in Germany and neighbouring countries. We produce many individual parts ourselves in Kiel, Germany.

An overview of our projects and references can be obtained at www.solprime.de.

We also offer the right mounting system for on-roof solutions.

We offer material for fixing the photovoltaic system for almost any type of roof. Our products are continuously optimised. All mounting systems are designed to ensure complete tightness of the roof after installation and secure and stable fixing of the system. The majority of the products are made of corrosion-resistant aluminium or stainless steel.



If you have any questions regarding the processing and technical properties of the mounting systems, our customer service and design engineers will be happy to assist you.





# AT HOME IN THE NORTH IN USE THROUGHOUT THE WORLD



GERMANY · ENGLAND · POLAND · AUSTRIA · SOUTH AFRICA · PERU · BAHAMAS · BOTSWANA · ZIMBABWE · TOGO NAMIBIA · DOMINICAN REPUBLIC · TURKEY · DENMARK · PAKISTAN · COLOMBIA · LATVIA · MADAGASCAR · ARGENTINA

BAD KÖSTRITZ · BALLENSTEDT · BASIN BRIDGE · BOWERHOUSE · BLÖSA · CADÓW · CATTENSTEDT · SWINDON CZARNOCIN · DEERSHEIM · DOBRYSZYCE · DRENTWEDE · DUBINY · EBERGÖTZEN · EBERSWALDE · EGELN EISENHÜTTENSTADT · FALKENSEE · FANNY HOUSE · FRIEDLAND · FRIEDLAND DATZE · GROBIA · GRONOWKO GROßBADEGAST · GOLZOW · GUILSBOROUGH · GÓRCYZN · HARZGERODE · HARSLEBEN · HENNICKENDORF HOHENTHURM · HORSTFELDE · HÖRSEL · ILBERSTEDT · IZABELÓW · JEŻEWO STARE · KARGOW · KAYSERI · KRUCKOW KENT · KOZIKI · LENZ · LEUSSIN · LIGOTKA WIELKA · LINDRIDGE · LISOWICE · LOWER NEWTON · LUCKENWALDE MAESGWYN · MARTFELD · MARKSBURY · MISSION · MODERÓWKA · MORFA CAMP · MROKOCIN · MÜHLENBECK MÜLLROSE · NELLSCHÜTZ · NETHER MILL · NETLEY · OSTENDE · OSTERNIENBURG · OSTROLEKA · PARSAU PARKVIEW · PENNINGTON · PÕLCHOW · QUEDLINBURG · REISDORF · RICKFIELD · ROGGENTIN · SEDZIEJOWICE SEELOW · SIEMIATYCZE · SIEMKOWICE · STARE LEWKOWO · STARA WIES · ATZENDORF · STRALENDORF · SONNEWALDE SOUTHDOWN MARINA · SUHL · SZCZAWIN · SÜLTE · TARNOGORA KOLONIA · TAUBENHÖRNCHEN · TAUNTON · TUTOW TECHENTIN · TIMMENRODE · TRUSZCZANEK · TUTOW · UNSEBURG · VANSELOW · WALDDREHNA · WALTERSHAUSEN WALLY CORNER · WEEDON · WEGELEBEN · WEITIN · WIDERSTEDT · WOLKOWE · WOLMIRSLEBEN · WRAYSBURY WRIEZEN · ZAHNA · ZALEZE · ZARNOWIEC · ZDUNSKA WOLA · ZIELECICE · ZELOW · ZEMMIN · ZSCHAUITZ · ZWICKAU

# SOLprime – Mounting systems The secure basis for your photovoltaic system!

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