

ANTAI Ground Mounting Kits

Fast Installation Guide for

2x9 Panel Array

1 Preparation

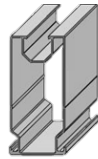
- 1.1 Component List
- 1.2 Tool List
- 1.3 Equipment List
- 1.4 Planning

2 Installation Procedure

5 Steps

1 Preparation

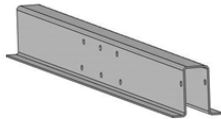
1.1 Component List



Rail × 12

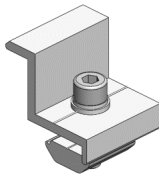


Pre-assembled Grinder × 4



Steel Pile × 4

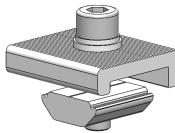
BOX



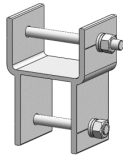
End Clamp × 8



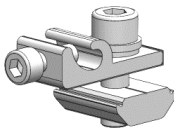
Mid Clamp × 32



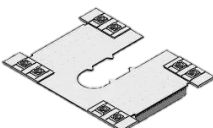
Rail Clamp × 32



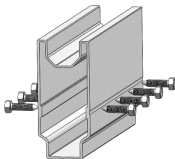
Connector × 4
(Pile & Bracing)



Grounding lug × 4



Earthing Clip × 32



Rail Connector × 10



Bolts and Nuts
(M12×4 M10×4)

Note: For more than 2 × 9 panels, additional rails and accessories might required.
Please contact Antai for material list.

1.2 Tool List



Allen Key



Electric Drill



Tape Measure



Markers



String



Torque Spanner



Socket Spanner



Adjustable Wrench



Level (optional)

1.3 Equipment List

ANTAI Ground Mounting Kits is compatible with driven pile foundation and concrete pier foundation (**25Mpa** strength concrete). The following equipment might be required for relevant options.



Pile Driver



Post Hole Digger
(for concrete foundation)

1.4 Planning

Additional parts for each extra pile (in wind region B1/B2)

Grinder Set × 1
Connector × 1
M10*90 Bolt/Nut Set × 1
M12*120 Bolt/Nut Set × 1
Beam Cap × 2
Tapping Screw × 3
Rail Clamp × 8

Note: For panel width larger than 1160mm, a total of more than 5 piles may be required in wind region B1/B2, details refer to engineering certification.

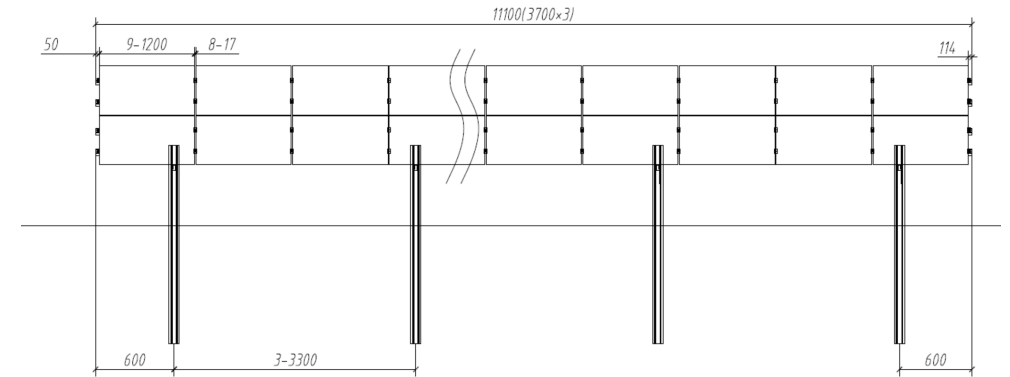


Figure 1: Wind **Region A** design drawing

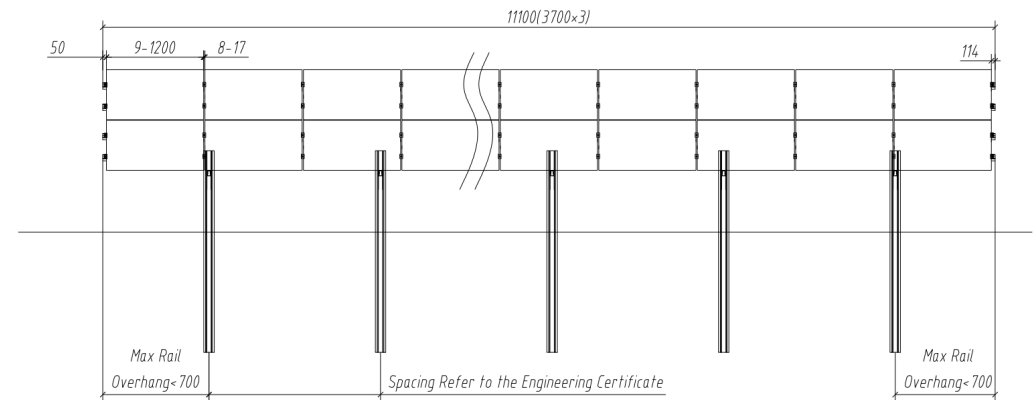
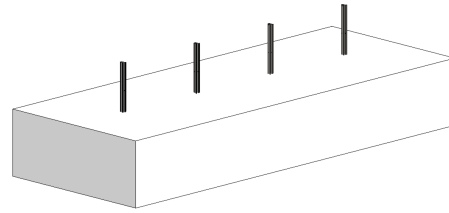


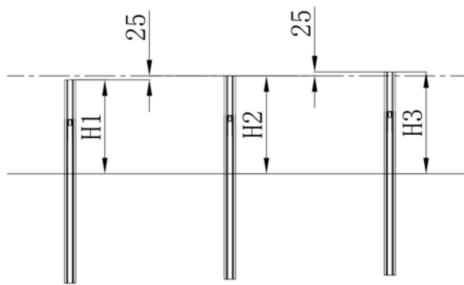
Figure 2: Wind **Region B1/B2** design drawing

2 Installation Procedure

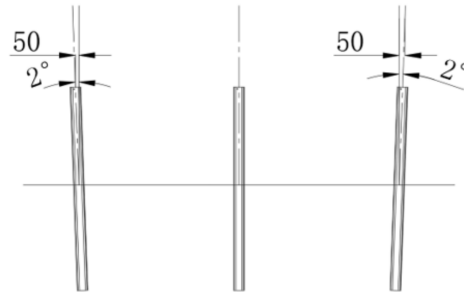
Step 1 Pile Installation



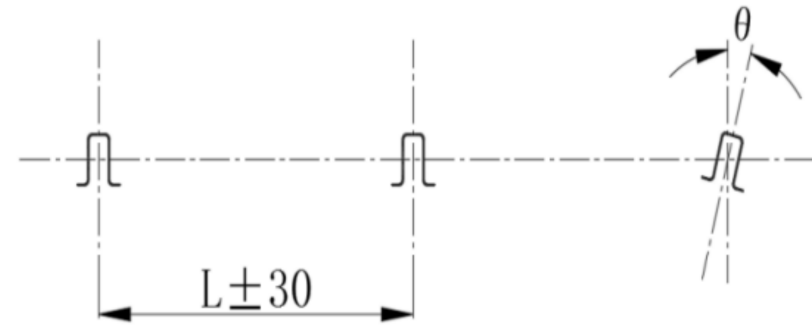
Note: Please check tolerance of post construction



North - South Direction



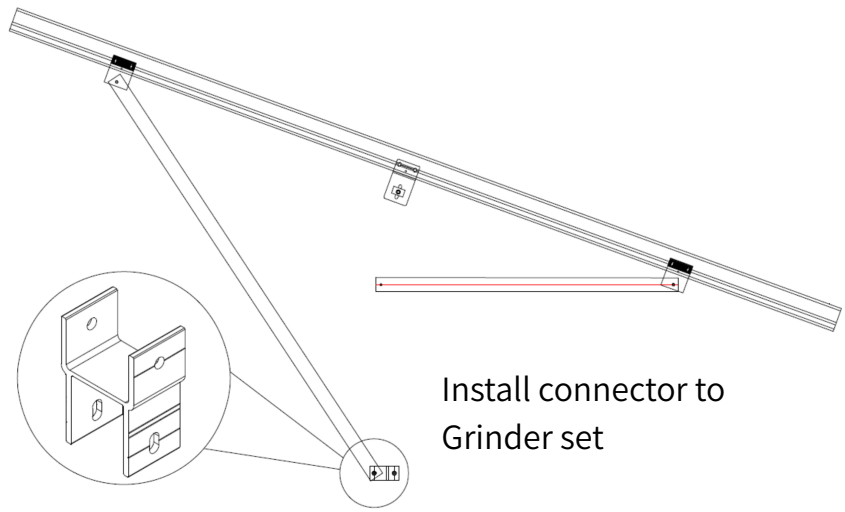
East - West Direction



East - West Direction pile opening $\Theta \leq \pm 2^\circ$

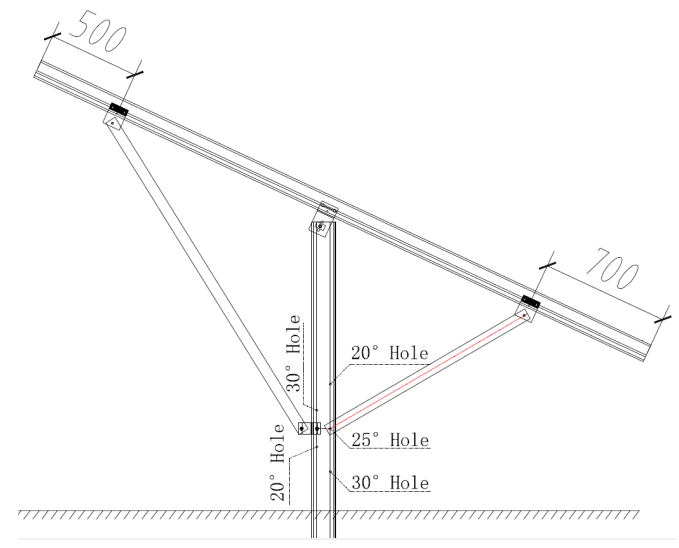
Step 2

Install Pre-assembled Girder To Pile



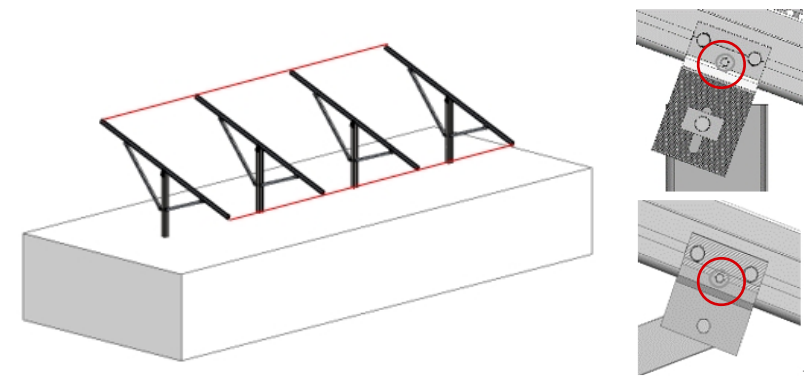
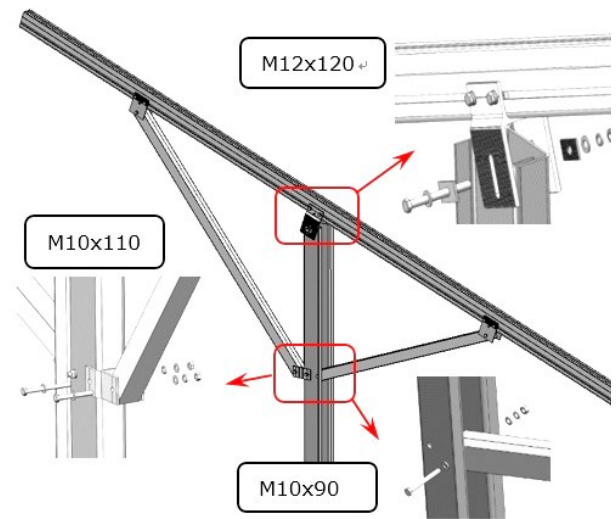
1

2



3

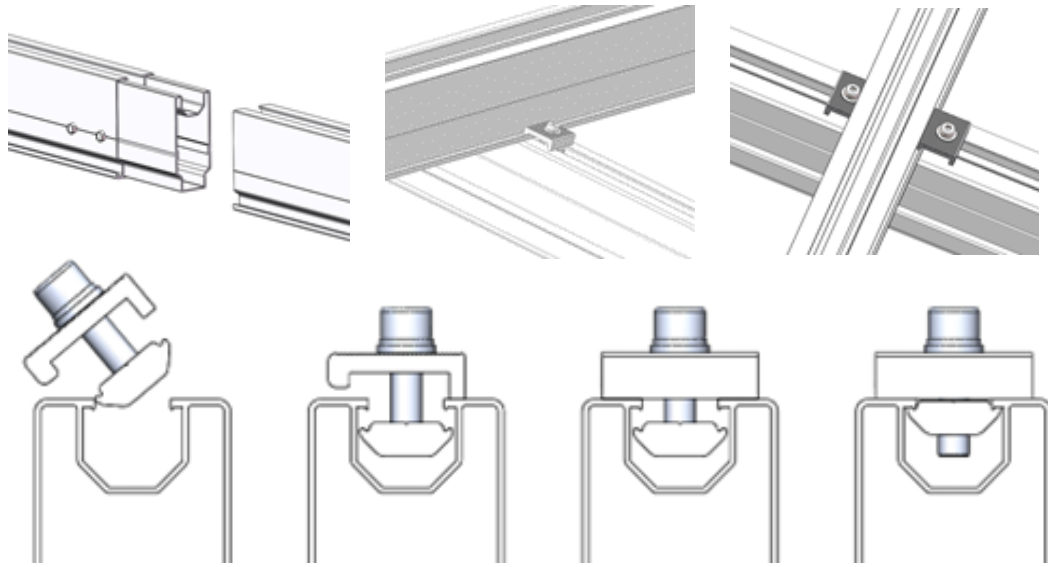
4



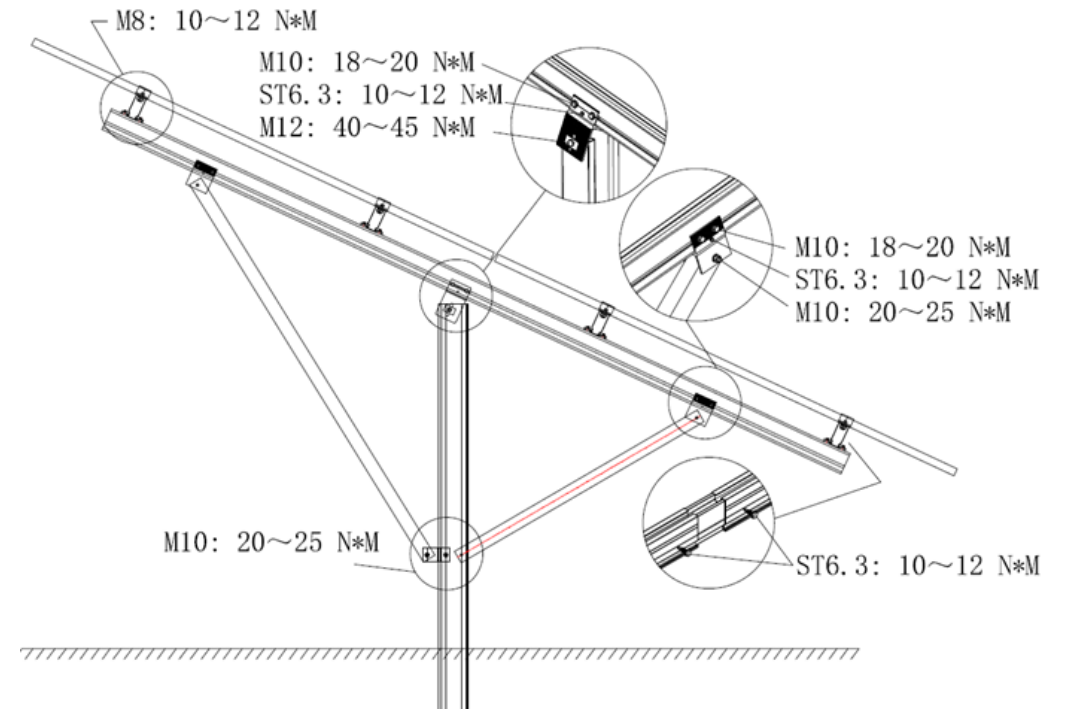
check alignment and then install ST6.3*25 screw

Step 3 Install Rails

Connect the rails using rail splices and fix each rail on beam with 2 rail clamps. Make sure the rail locations are in line with the panel clamp zone in the panel drawings.

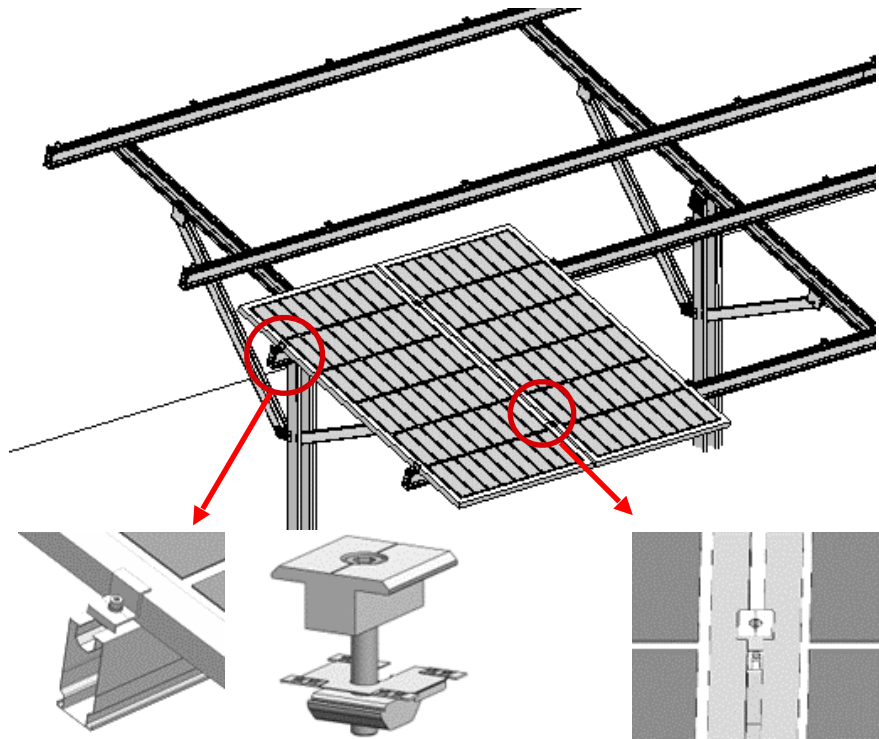


Check torque



Step 4

Module Installation By Mid/End Clamp



Step 5

Install Grounding Lug And End Caps

