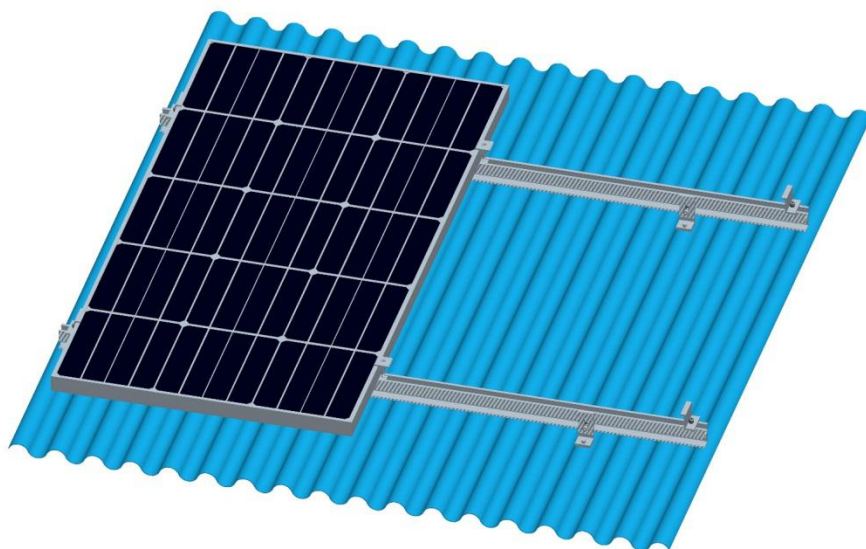




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NEWAY Installation Manual

Pitched Roof Solution
(Solar mounting system)

Version 2018 1.0

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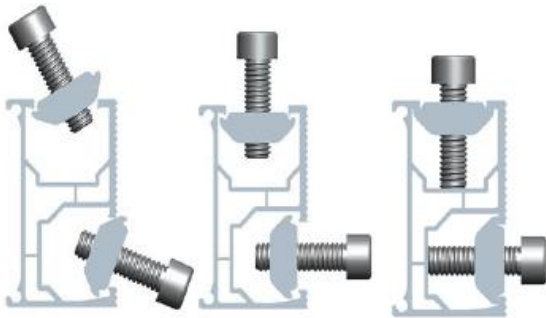
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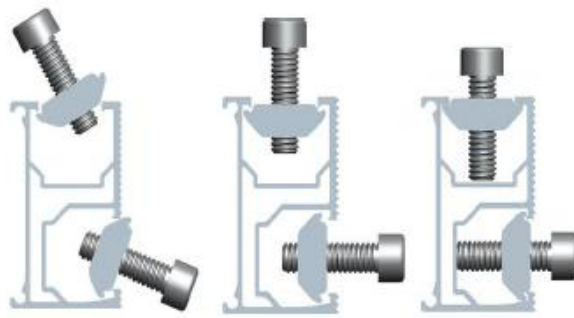
GENERAL INTRODUCTION

ANTAISOLAR/NEWAY Roof Mounted solutions, accommodating a wide range of modules, are suitable for most types of roofs. With innovative ANT AISOLAR/NEWAY Rail and T module, ANT AISOLAR/NEWAY Roof Mount enables significantly faster, easier installations, which have been developed into one of the most versatile mounting solutions in the world, delivering time and cost effective experience to solar system installers.

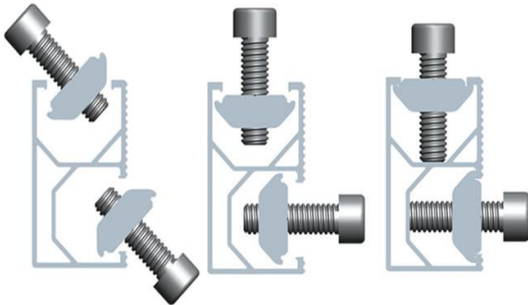
Rail II



Rail III



Rail IV



Easy to be installed

ANT AISOLAR/NEWAY features series of highly engineered new innovative product, designed with experienced engineers to the speed of installation. ANT AISOLAR/NEWAY pitched roof solar mounting system is backed by a 10-year warranty and is compliant with AS/NZS1170.2.2011(R2016)

Benefits of ANT AISOLAR/NEWAY Pitched Roof Mounting System



- Easy Installation
- Diversified Application
- High Accuracy
- Choice Quality
- Engineered to highest standards
- Maximum Lifespan
- Guaranteed durability



TECHNICAL SPECIFICATIONS

Applications

- Commercial and residential buildings
- Marine applications and remote areas

Features

- Anodized 6005-T6 aluminum extrusion
- Innovated designed of the Tilt-in modules, which can be pre-assembly with the clamp, make the installation easy and quick.
- Suitable for difference conditions and the most solar panels at present market.
- Significantly higher strength-to-weight ratio than other framing products, providing improved efficiency due to greater frame spans, inherent corrosion resistance resulting in low ongoing maintenance and an extended product life.
- Complies with Australian/New Zealand Standard on Wind Actions, AS/NZS1170.2.2011(R2016)
- 10 years limited warranty backed up by parent company Antai Aluminum

Material

Material	Tensile strength	
	Tensile	Yield
6005 T6 aluminum extruded	$\geq 260\text{Mpa}$	$\geq 225\text{Mpa}$
Stainless steel 304	625.55Mpa	263.8Mpa
Stainless steel A2-70	700MPa	450Mpa

Installation condition

Roof slope	Up to 60°
Building height	Up to 20m
Mounting structure	Timber/ steel
Roof types	Tile/Tin/Klip-Lok® roof
System angle	Flush with roof

Note: If the condition is beyond the table list, please contact us to confirm



SAFETY AND INSTALLER RESPONSIBILITIES

Handling and Installing ANTAISOLAR/NEWAY

It is critically important that safety practices are observed when installing

- Do not throw or roughly handle any ANTAISOLAR/NEWAY components.
- Do not bring ANTAISOLAR/NEWAY system into contact with sharp or heavy objects.
- Do not modify ANTAISOLAR/NEWAY components in any way. The exchange of bolts, drilling of holes, bending or any other physical changes not described in standard installation procedure will void the warranty.
- It is the installer's responsibility to verify the integrity of the structure to which ANTAISOLAR/NEWAY components is fixed. Roofs or structures with rotten/rusted bearers, undersized bearers, excessively spaced bearers, or any other unsuitable substructure cannot be used with ANTAISOLAR/NEWAY components, and installation on such structures will void the warranty, and could result in death or serious injury.

Wind and Climate Design

AS/NZS1170.2.2011 provides guidance on determining the wind pressures applicable to your ANTAISOLAR/NEWAY system install site, taking into account roof shape and geographic location. Sufficient guidance is given in this document, but you may wish to procure a copy of these standards if your company installs Australia/New Zealand wide.

- REMEMBER average wind speeds are higher for structures mounted closer to the roof perimeter zone (edge). Refer to 'Fixing within Roof Installation Zone' for more information)
- Make sure your installation complies with local and national building codes. Take into account relevant design parameters (wind speed, exposure and topographic factor) when determining the loading for the installation.
- If alternative fasteners are used to fix the framing to the roof (assuming supplied fasteners are unsuitable for any reason), all screw fasteners must conform to corrosion resistance Class 4 Australian Standard AS3566 and be of equal or greater strength to those supplied with your ANTAISOLAR/NEWAY system order.

CAUTION: INSTALLATION OF THIS PRODUCT IS TO BE PERFORMED ONLY BY PROFESSIONALLY TRAINED INSTALLERS. ANY ATTEMPT BY AN UNQUALIFIED PERSON TO INSTALL THIS PRODUCT COULD RESULT IN DEATH OR SERIOUS INJURY.



COMPONENTS LIST

Overview of system components

Part name	Picture	Part name	Picture
Rail CG-010		Rail splice	
Rail CG-019		Rail Splice	
Rail clamp (L connector)		L Bracket (L Foot)	
Inter Clamp (with T-module)		End Clamp (with T-module)	
Tile Roof hook		Hexagon socket bolt M8*30/45/50/55/60	
Klamp Lock 700		Klamp Lock 406	
Standing Seam Clamp		Kalzip clamp	

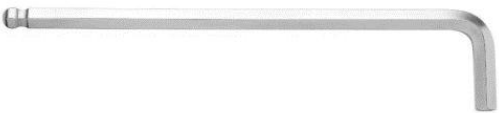

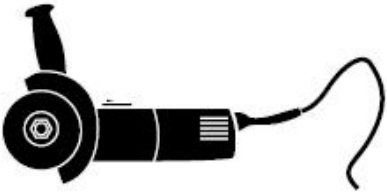



Note: The quantity of requested components depends on the system you ordered.

BEFORE INSTALLING

Receipt of goods

Check that the ANTAISOLAR/NEWAY equipment is undamaged and that the order is complete. Check for correct quantities of the items.

Tools required for installation

6 mm Allen key or hexagonal driver bit. If using a 6mm driver bit, make sure the cordless power tool used for the driving has a hand-tight clutch setting a fine (soft) impact drive to prevent damage to the fragile glass panels and threads on the structure.	
Cordless drill. Drill or impact driver for driving roof material fixings	
Angle grinder. For terracotta tile roof installation, and angle grinder fitted with a continuous edge diamond tipped tile cutting blade; gloves, hearing protection, a face protection mask, and a suitably rated breathing protection mask for all people in proximity of grinding	
Gloves. Protect the hazard of the sharp corners.	
Cord or color pen. Mark the installation position.	
Spirit level	



Measuring tape



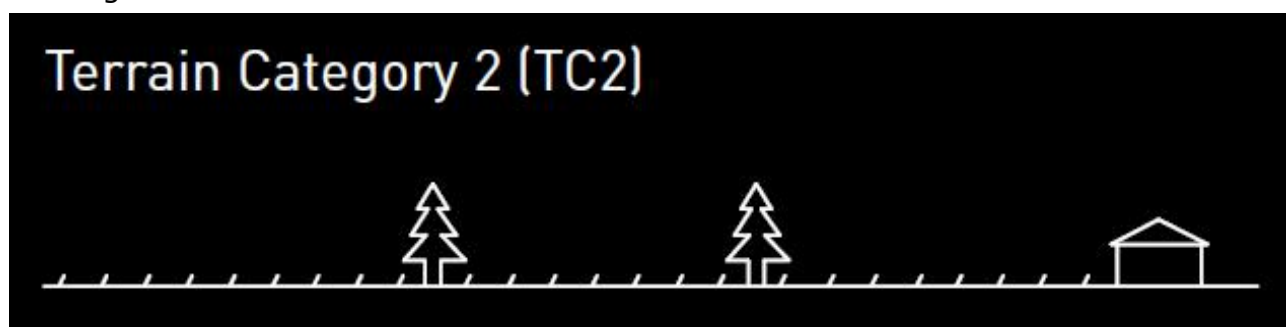
* If necessary, timber to shim the roof hook

INSTALLATION PLANNING

DETERMINING WIND TERRAIN CATEGORY

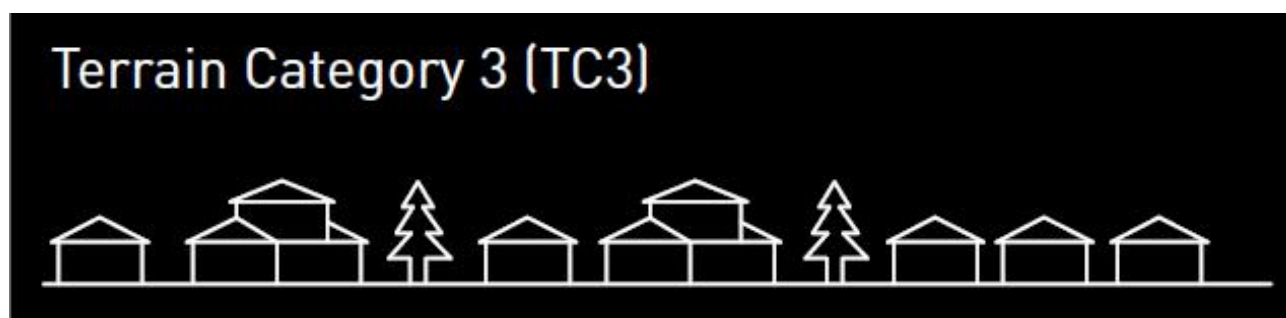
Terrain Category 2

Open terrain, including grassland with well scattered obstructions having heights generally from 1.5 meters to 5 meters. Examples include farmland or cleared sub-divisions with isolated trees and uncut grass.



Terrain Category 3

Terrain with numerous closely spaced obstructions having heights generally from 3 meters to 10 meters. Examples include typical suburban housing or light industrial areas.



DETERMINING WIND REGION

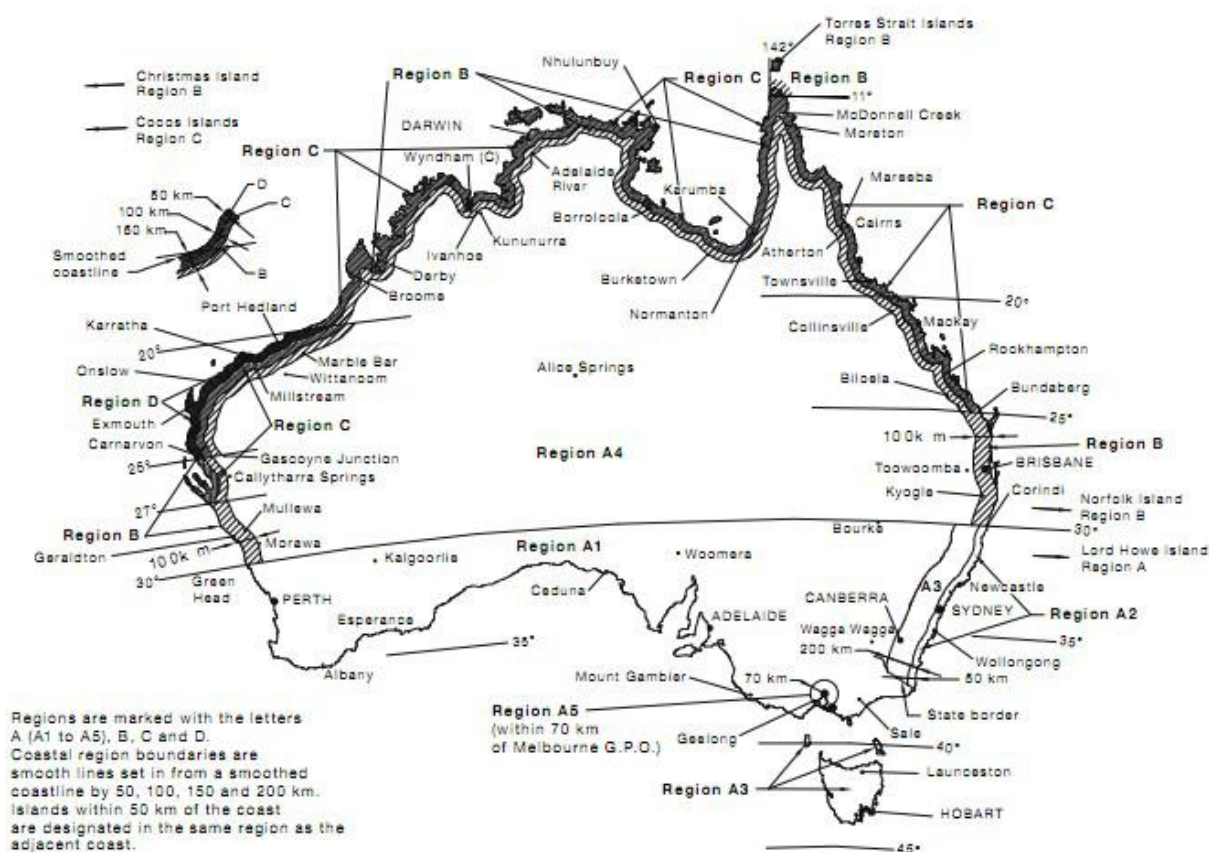


FIGURE 3.1(A) WIND REGIONS

Figure: National wind map (in accordance with AS/NZS 1170.2:2011,R2016)

Wind regions are pre-defined for all of Australia by Australian Standard AS/NZS 1170. The Wind Region has nothing to do with surrounding topography or buildings.

Wind Zone	A	B	C	D
Wind Speed (m/s)	43	52	64	79.2

Included towns:

Region A:

Callytharra Springs, Gascoyne Junction, Green Head, Kununurra, Lord Howe, Island, Morawa, Toowoomba, Wittanoom, Bourke

Region B:

Adelaide River, Atherton, Biloela, Brisbane, Christmas Island, Collinsville, Corindi, Geraldton, Ivanhoe, Kyogle, Marble Bar, Mullewa, Norfolk Island, Torres Strait Islands, Wyndham

Region C:

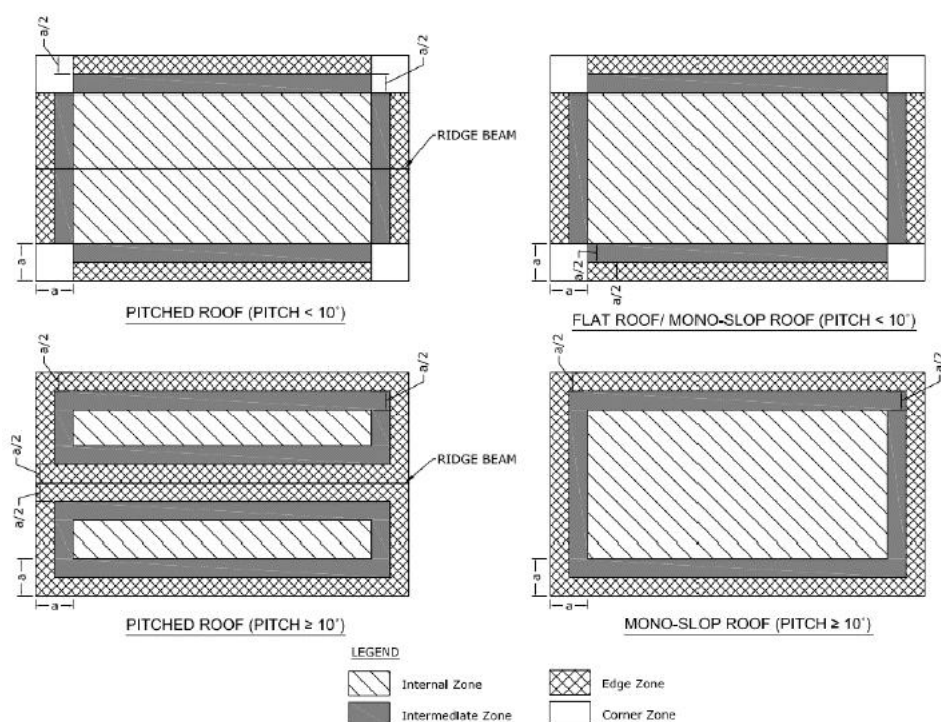
Borrooloola, Broome, Bundaberg, Burketown, Cairns, Cocos Islands, Darwin, Derby, Karumba, Mackay, Mareeba, Millstream, Moreton, Nhulunbuy, Normanton, Rockhampton, Townsville

Region D:

Carnarvon, Exmouth, Karratha, Onslow, Port Hedland

PLANNING THE MODULE AREA

Solar panels can be installed anywhere on the roof, as long as sufficient fixings are used. Higher wind speeds are encountered at the edges of roofs and therefore more fixings are required in these areas. For a flush mounted array, a roof can be divided into two zones, the central zone and D.W&U.W zone. The width of these zones can be determined based on the length of the building.



Determining the width of the central and end zones, 'B/3'. The width of the central and end zones is determined by calculating the roof length and dividing this result by 3. An exclusion zone of 600 mm must be made on the edges of the roof.

- For the definition of Downwind, Upwind end and central, refer figure D9 from AS/NZS 1170.2-2011.
- For the definition of Intermediate and Internal roof zone, refer the following figure.
- Corner and Edge zone are recommended exclusion zone.
- Figure: Panel must be installed flat to the roof

DETERMINE THE HEIGHT OF THE INSTALLATION SITE

This document provides sufficient information for ANTAISOLAR/NEWAY system installation height less than 20 meters. If your installation site is more than 20 meters in height, please contact ANTAISOLAR/NEWAY to obtain engineering data to support your installation.



VERIFY ACCEPTABLE RAIL END OVERHANG

Rail end overhang must equal 50 percent or less of foot spacing. Thus, if foot spacing is 1200mm, the Rail end over hang can be up to 600mm. In this case, two feet can support a rail of as much as 2400mm (1200mm between the feet and 600mm of overhang at each end).

DETERMINE ROOF SLOPE

ANTAISOLAR/NEWAY mounting system can be used for roof slope up to 60 degrees. This document provides sufficient information for below 30 degrees, please contact ANTAISOLAR/NEWAY for between 30 and 60 degrees.

DETERMINE THE MAXIMUM RAIL SUPPORT SPACING

Please use the table in certification of compliance to determine the ANTAISOLAR/NEWAY Rail support spacing for installations. Certification of compliance please request from dealer or contact ANTAISOLAR/NEWAY. Below only for reference.

1.

Structural Design Summary Table

Roof Mounting System with Type V Rail

For

Fujian Antai New Energy Tech. Co., Ltd.
in accordance to AS1170.2 2011 Amdt 5 - June 2017

Terrain Category 3



Tile Roof $5^\circ < \alpha < 10^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1804	1626	1625	1314		1179	823	727	514
15 m	1722	1559	1556	1116		1006	704	627	445
20 m	1664	1422	1424	985		890	626	555	397

Tile Roof $10^\circ < \alpha < 20^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1676	1436	1468	993		916	632	572	399
15 m	1605	1217	1247	851		782	542	491	345
20 m	1553	1074	1098	754		696	484	437	308

Tile Roof $20^\circ < \alpha < 30^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1626	1544	1314	1081		823	684	514	431
15 m	1559	1328	1116	923		704	588	445	374
20 m	1422	1171	985	819		626	525	397	333

Tile Roof $30^\circ < \alpha < 60^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1638	1495	1550	1168		1162	832	813	526
15 m	1600	1346	1436	1046		1037	719	701	454
20 m	1570	1235	1323	955		948	638	624	402

Tin Roof $5^\circ < a < 10^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1804	1626	1625	1477		1432	1307	1262	1155
15 m	1722	1559	1556	1419		1377	1258	1213	1115
20 m	1664	1509	1506	1375		1333	1223	1178	1083

Tin Roof $10^\circ < a < 20^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1676	1512	1518	1378		1345	1226	1187	1086
15 m	1605	1451	1457	1325		1293	1179	1144	1046
20 m	1553	1407	1413	1285		1255	1145	1109	1017

Tin Roof $20^\circ < a < 30^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1626	1544	1477	1407		1307	1249	1155	1106
15 m	1559	1483	1419	1352		1258	1203	1115	1066
20 m	1509	1436	1375	1311		1223	1168	1083	1038

Tin Roof $30^\circ < a < 60^\circ$ TG.3 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1638	1527	1550	1433		1426	1313	1299	1161
15 m	1576	1486	1509	1392		1385	1266	1250	1121
20 m	1570	1457	1480	1363		1356	1229	1213	1089

2.

Structural Design Summary Table

Roof Mounting System with Type V Rail

For

Fujian Antai New Energy Tech. Co., Ltd.
in accordance to AS1170.2 2011 Amdt 5 - June 2017

Terrain Category 2



Tile Roof $5^\circ < a < 10^\circ$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1600	1229	1232	859		774	548	486	348
15 m	1553	1100	1101	769		696	493	440	313
20 m	1492	1030	1031	725		655	464	414	296

Tile Roof $10^\circ < a < 20^\circ$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1375	934	955	658		609	423	385	270
15 m	1226	838	856	591		548	383	348	244
20 m	1150	788	804	556		516	359	328	230

Tile Roof $20^\circ < a < 30^\circ$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1229	1016	859	714		548	458	348	293
15 m	1100	911	769	641		493	414	313	264
20 m	1030	855	725	603		464	388	296	250

Tile Roof $30^\circ < a < 60^\circ$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1530	1118	1200	859		855	559	546	354
15 m	1424	1033	1110	787		782	504	491	319
20 m	1363	987	1060	740		733	475	463	302

Tin Roof $5^{\circ} < a < 10^{\circ}$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1600	1454	1454	1328		1290	1182	1141	1049
15 m	1553	1413	1413	1290		1255	1151	1112	1023
20 m	1527	1392	1390	1273		1235	1133	1095	1006

Tin Roof $10^{\circ} < a < 20^{\circ}$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1495	1357	1363	1241		1211	1107	1075	986
15 m	1454	1322	1325	1209		1182	1081	1049	960
20 m	1430	1302	1305	1191		1162	1064	1032	946

Tin Roof $20^{\circ} < a < 30^{\circ}$ TG.2 Type V Rail Roof Mounting System

For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1454	1387	1328	1267		1182	1130	1049	1003
15 m	1413	1349	1290	1235		1151	1101	1023	977
20 m	1392	1328	1273	1215		1133	1084	1006	966

Tin Roof $30^{\circ} < a < 60^{\circ}$ TG.2 Type V Rail Roof Mounting System

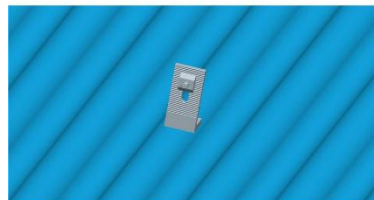
For Up To 2000m Long Panels (2 Rails) Max. Support Spacing (mm)									
Installation Height (m)	Region A		Region B			Region C		Region D	
	Center	Edge	Center	Edge		Center	Edge	Center	Edge
10 m	1535	1422	1442	1328		1321	1188	1173	1052
15 m	1509	1392	1416	1299		1293	1156	1144	1026
20 m	1492	1375	1398	1279		1272	1139	1127	1012

INSTALLATION INSTRUCTION

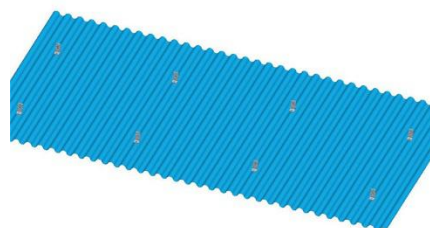
1. INSTALL FOUNDATION TO ROOFTOP

● A. Installation of L-bracket on Metal Roof

Determine the positions of the L-bracket according to your plans.



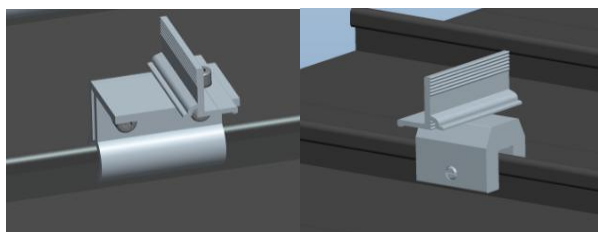
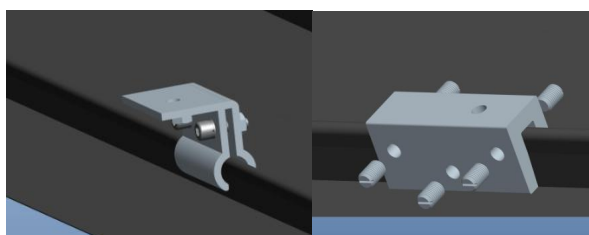
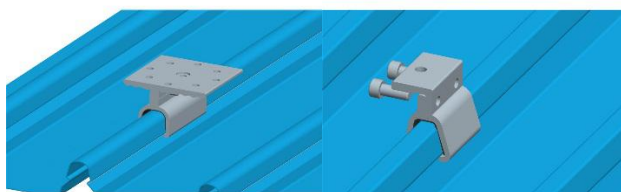
then, Fix the L bracket (together with Rubber Pad) to the rafter using SUS 410 Screw, fix other L brackets to the rafter according to your plans.
Note: The rubber pad plays the role of waterproof.

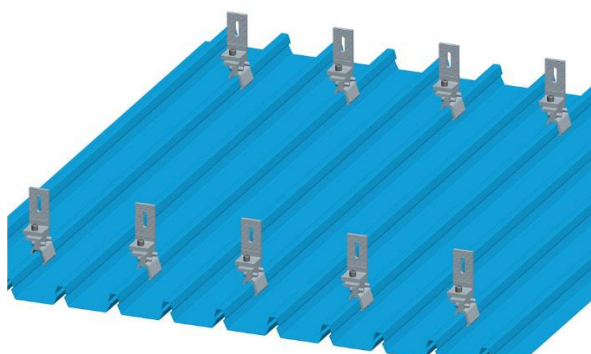
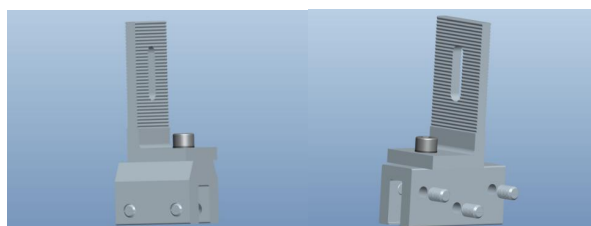


● B. Installation of Klamp Lock on Metal Roof

Use standing seam clamp to clip the metal roof tightly, and place L-Bracket/L-connector on clamp and connect them by tightening M8*20 Bolt.

Note: If Klamp Locks are being used then fixing centres are subject to those outlined installation manual for Klamp Lock 406 & Klamp Lock 700.





C. Installation of Tile Hook on Tile Roof

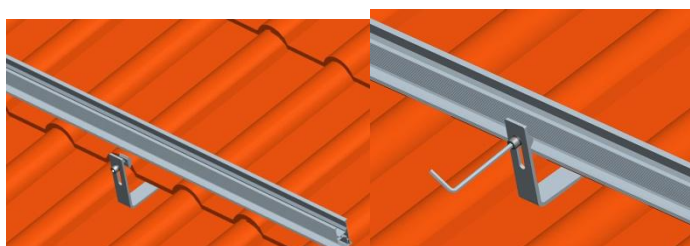
Remove the roof tiles at the marked positions or simply lift them up slightly then input the roof hook to the wooden beam. Fix the roof hooks with 3x self-tapping screws. Minimum 2 pcs



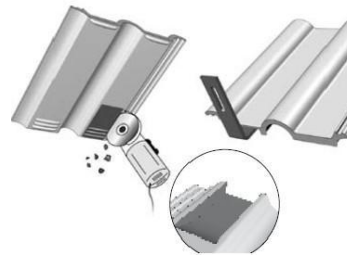
Cover the hooks by the removed tile



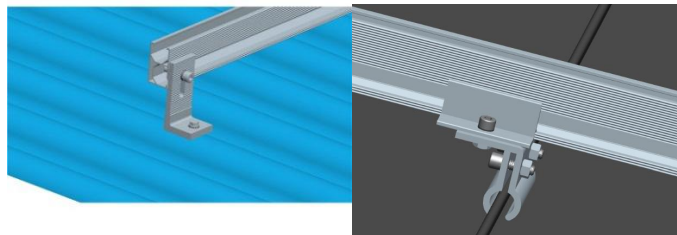
Connect the roof hook with the rail.
a. Insert the tilt-in module into the side channel of the rail as the step 9 shown.
b. Adjust the rail to be level.
c. Fasten the bolt.



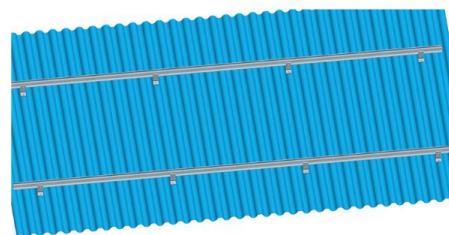
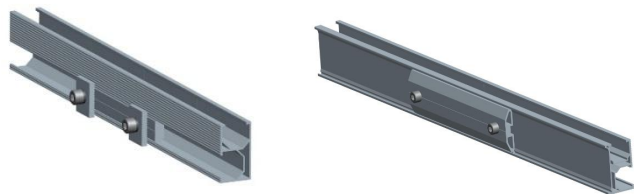
Note: If necessary, use an angle grinder or hammer to cut a concavity in the tile that covers the roof hook at the point where the roof hook comes through. (Caution! Must not use fixed roof hook as a ladder, as this extreme point load could damage the tile below.



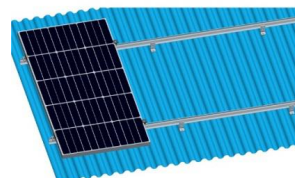
2. Connect the L bracket with rail by T-module and tighten the bolt.

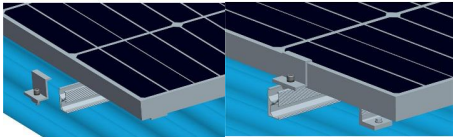
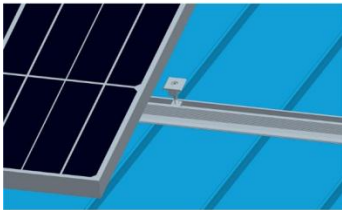
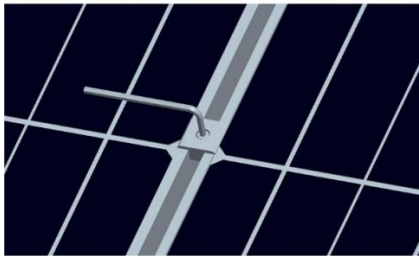
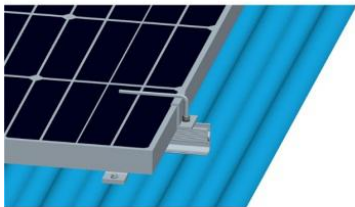
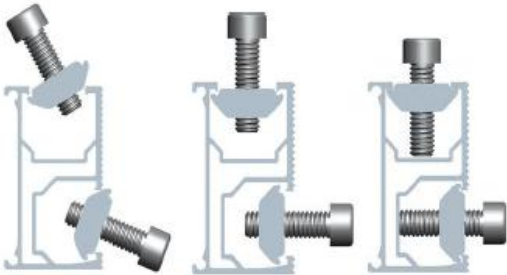


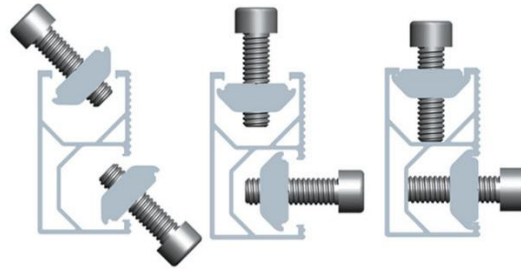
3. If you need, to connect multiple rails together, slide the splices on the rear side of the pre-assembled rails halfway to the side. Fasten the first M8 bolt firmly using the Allen key. Now slide the next rail segment into the splice. Tighten the second M8 bolt. The connection is finished.



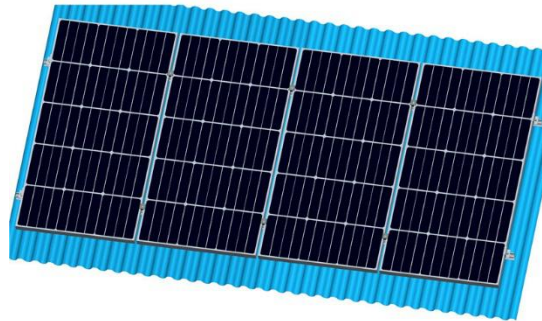
4. Place the solar module on the rails, slide the end clamp tightly against the solar module and fasten tightly using the Allen bolt (recommended torque is 8 Nm)



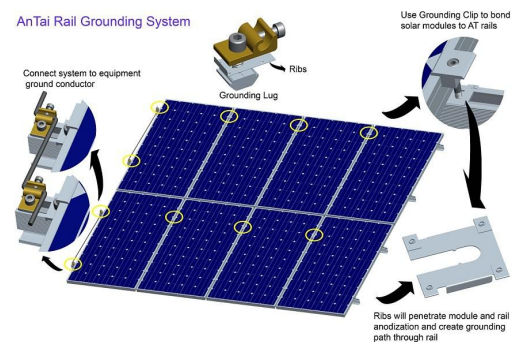
	
<p>5. Slide the pre-assembled inter-module clamp into the rails from above, place it firmly against the module and fasten loosely (approx. 2-3 turns).</p>	
<p>6. Now slide the next module against the previously installed module and tighten the inter-module clamp using the Allen key, Take care that the anti-slips protection sits in the rail channel of the lowest row of rails.</p>	
<p>7. Place the last module in the row on the rails (with the first row of modules, take care that the anti-slip protection sits properly in the rail channel) and fasten the last inter module clamp and the module end clamp using the Allen Key (recommended torque is 8 Nm).</p>	
<p>8. For each use of the T module. You must make sure that: the thread of the screws does not project through the lower side of the T module (max flush). Position the T module in the rail channel and fasten it loosely with 2 to 3 turns of the screw. The screws can still be freely moved in the rail channel. Slide the screw to their final position in connection with the inter-module clamp, module end clamp or roof hooks/hanger bolts and fastens firmly.</p>	



9. Now first row of modules are installed, continue to mounting next row of modules according to steps 7 to 10.



10. Antai rail grounding system



WARRANTY

In so far as Fujian Antai New Energy Tech. Co., Ltd. (Hereafter called ANTAISOLAR/NEWAY) grants the customer a 10 year warranty to solar mounting systems, except for the anodized finish, which finish shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of five (5) years. The Warranty Start Date is the date of delivery of the Product(s) to the Buyer or 2 months after the date of Product(s) dispatch from ANTAISOLAR/NEWAY manufacturing site, whichever date is earlier.

Warranted Products

All anodized aluminum products and stainless steel 304 components in the solar mounting systems.

Exclusions and Limitations



In the event that damage is caused to a purchased item, despite proper installation and handling and in the context of normal use and maintenance, ANTAISOLAR/NEWAY will immediately exchange the respective component within the warranty period. The following terms shall apply

1. Failure to comply with ANTAISOLAR/NEWAY' s installation manual;
2. Service by service technicians who are not qualified under the relevant law and/or applicable regulations at the place of installation;
3. The warranty period for each component defined in the respective product sheet by ANTAISOLAR/NEWAY shall apply. The warranty period commences with the transfer of risk of the respective component; if, for particular components, generally or for a particular type of use a possible shorter life is expressly indicated within ANTAISOLAR/NEWAY' s individually-generated plans, an exchange is scheduled within a shorter period, the warranty period shall be restricted to such life or period.
4. The warranty is limited to additional delivery for the defective components upon notification of the damage within the warranty period. Any statutory guarantee or liability claims shall remain unaffected.
5. The obligation to fulfill the warranty shall not apply if the damage has arisen in connection with exceptional stress (e.g. storm damage, impact of instability of the sub-surface, particular chemical or biological effects). Or in such conditions, accident, force of nature (such as lightning strike, earthquake), influence from chemical products or other acts beyond ANTAISOLAR/NEWAY's reasonable control (including damage by fire, flood, etc.)
6. With regard to installation and handling, the technical product descriptions and installation instructions regarding the respective products as supplied by us shall apply, as shall the statutory and generally-recognized standards and principles of building and construction work in local market as well as, as appropriate, on a priority basis, the plans, statics and instructions prepared by us individually for the customer.
7. No claims shall exist if the damage is covered or can usually be covered by insurance against storm and similar events (natural-peril insurance).
8. This warranty shall only be applied to solar mounting systems designed by ANTAISOLAR/NEWAY. Custom design products if suggestions by ANTAISOLAR/NEWAY are declined, this product is excluded in this warranty.
9. This warranty shall only establish claims of ANTAISOLAR/NEWAY's customer, via which all warranty claims are to be settled. Assertion by third parties shall only be possible if ANTAISOLAR/NEWAY agrees thereto.
10. Limited Warranty does not apply to any Products which have been subjected to use of the Products in such a manner as to infringe ANTAISOLAR/NEWAY's or any third party`s intellectual property rights (e.g. patents, trademarks).

Repair, Replacement or Refund Remedy

1. As Buyer's sole and exclusive remedy under this Limited Warranty (though Buyers should note paragraph 4 below regarding the potential existence of other statutory rights), ANTAISOLAR/NEWAY will, in its sole discretion, either, with regard to the applicable Product (or component thereof in the case of Mounting Product):

- a) refund the historical purchase price of the relevant Product(s); or
- b) repair the defective Product(s) at no charge (subject to the following paragraph); or
- c) replace the defective Product(s) or part thereof by a new or remanufactured equivalent at no charge (subject of the following paragraph).



In the event that ANTAISOLAR/NEWAY opts for options b) or c), ANTAISOLAR/NEWAY shall bear all insurance and transportation charges (except air freight, courier freight), customs clearance and any other costs for returning the defective Product(s) to ANTAISOLAR/NEWAY and shipping the repaired or replaced Product(s) to Buyer (a Buyer may claim reimbursement by ANTAISOLAR/NEWAY for these charges by contacting ANTAISOLAR/NEWAY and providing proof to ANTAISOLAR/NEWAY that these charges were incurred, e.g. an invoice from the relevant service provider). The costs and expenses for their removal, installation or reinstallation shall remain with Buyer.

2. The warranty period(s) shall not extend or renew upon the repair or replacement of a defective Product by ANTAISOLAR/NEWAY. The warranty period for replaced or repaired Product(s) is the remainder of the warranty on the original new Product(s).

3. All other claims under this Limited Warranty against ANTAISOLAR/NEWAY shall be excluded. Under this Limited Warranty, ANTAISOLAR/NEWAY is not responsible for any special, incidental or consequential damages (including loss of profits, harm to goodwill or business reputation, or delay damages) whether such claims are based in contract, warranty, negligence or strict tort. This exclusion applies to the extent permissible by law, and even if the remedies set forth below herein are deemed to have failed of their essential purpose.

Rights and Remedies against Third Parties

This Limited Warranty shall be construed as a separate warranty and independent from any other contractual arrangement with third parties relating to the Product(s). It shall not affect any rights, obligations and remedies of the Buyer, if any, with regard to third parties for defects or non-conformity or non-compliance of the Products, notwithstanding its legal basis. The rights and remedies provided hereunder are in addition to any other rights and remedies against third parties to which Buyer may be entitled by agreements with such third parties or by law.

Claims Procedure, Notice Periods, Expiration of Warranty Claims and Limitations

1. Buyer shall notify ANTAISOLAR/NEWAY immediately after discovery of any claim under this Limited Warranty by letter, facsimile or e-mail specifying each alleged claim including evidence of the claims and the serial numbers of the Product(s) at issue.
2. Any claim for breach of this Limited Warranty must be brought within three (1) months after discovery of the breach.
3. The return of any defective Product(s) will not be accepted unless prior written authorization has been given by ANTAISOLAR/NEWAY.

Force Majeure



ANTAISOLAR/NEWAY shall not be responsible or liable in any way to the Buyer for any non-performance or delay in performance under this Limited Warranty due to occurrences of force majeure such as, war, riots, strikes, unavailability of suitable and sufficient labor, material, or capacity or technical or yield failures and any unforeseen event beyond its control, including, without limitation, any technological or physical event or condition which is not reasonably known or understood at the time of the sale of the defective Product(s) or the notification of the relevant warranty claim under this Limited Warranty.

Warranty Assignment

This Limited Warranty is only applied when the Products remain installed in their original installation location.

Validity

This Limited Warranty shall apply to Product(s) manufactured after 1st January 2014. This Limited Warranty shall be valid until a new revision is issued by ANTAISOLAR/NEWAY.

No other Warranty

Unless modified in a writing signed by an officer of ANTAISOLAR/NEWAY, the Limited Warranty set forth herein is the only express warranty (whether written or oral) by ANTAISOLAR/NEWAY applicable to the Products and no one is authorized to restrict, expand or otherwise modify this Limited Warranty.

Miscellaneous

If any provision of this Limited Warranty is held invalid, unenforceable or contrary to law then the validity of the remaining provisions of this Limited Warranty shall remain in full force and effect.

MAINTENANCE AND CLEANING

6005-T6 anodized aluminum is largely maintenance free. Only in highly polluted or marine conditions is rinsing with clean water required, during scheduled panel cleaning.

REFERENCES

AS/NZS 1170.2:2011/Amdt 3:2012 on wind actions
AS/NZS16641.1:1997 on aluminum structures
AS1720.1:2012 on timber structures
AS/NZS4600:2005 on cold-formed steel structures
AS3566-2011, self-drilling screws for the building and construction industries.



CONTACT DETAILS:

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Email: info@antaisolar.com

APPENDIXES:

- Array Frame Engineering Certificate - ANTAI Type V - Klip
- Array Frame Engineering Certificate - ANTAI Type V - Roof Mounting

These Engineering Certificates contain important installation requirements. Please obtain these certification from your distributor.

