

Our Ref: 21170

January 2019

Fujian Antai New Energy Tech. Co., Ltd.

Klip-Lok Type Clamp PV Mounting System for use within Australia - Type T Rail

Dome Consulting (Aust) Pty Ltd have carried out a structural design check of the Fujian Antai New Energy Tech. Co., Ltd. Adjustable Tilt Legs System for use in Australia. The design check has been based on the information provided by Mortec Industries

Australian Standards

AS 1170. 2011 – Structural Design Actions

Part 0 – General Principles

Part 1 – Permanent imposed and other actions

Part 2 – Wind Actions

Part 3 – Snow and Ice Actions

AS 1664.1 – Aluminium structures - Limit state design

Following design criteria has been used for the structural verification

Wind Region A, B, C, D

Wind Terrain Category 2 & 3

Wind average recurrence interval of 100 years

Maximum Building height 20 m

Max. Solar Panel length 1650mm (for larger panel, refer to notes)

The design and documentation has determined that all supporting componentry in the above mentioned documentation was found to be acceptable.

Refer to attached summary table for interface spacing.

Construction is to be carried out strictly in accordance with the manufacturers instructions. This work was designed in accordance with the provisions of Australian Building Regulations and in accordance with sound, widely accepted engineering principles

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Fujian Antai New Energy Tech. Co., Ltd.

Structural Design Summary Table

KLIP-LOC TYPE CLAMP ACCREDITATION WITH TYPE T RAIL

For

Adjustable Triangle, Adjustable Tilt Legs and Direct Mounting
in accordance to AS1170.2 2011 Amdt 5 - June 2017

Terrain Category 3

Direct Mounting or using L-feet and rails - Anywhere on the roof

SUMMARY - T.C. 3 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

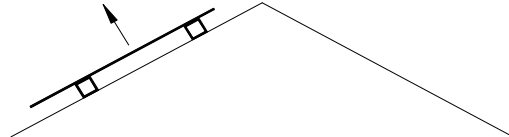
Fixing anywhere on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	0.40
Lysaght 700	0.87
Longline 305	1.68
Stramit SDU	0.73
Fielders 700	0.43

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.80	0.75	0.84	0.84	1.02	0.90	1.10
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	660	535	575	505	505	415	480	385
KlipLok 700	1415	1165	1250	1110	1110	910	1045	845
KingKlip 700	705	575	610	545	545	450	505	415
Stramit SDU	1205	980	1045	930	930	760	875	715
Longline 305	1490	1415	1490	1415	1440	1365	1400	1330
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.40	1.14	1.50
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	515	385	440	335	400	300	375	280
KlipLok 700	1120	855	975	740	880	665	815	620
KingKlip 700	555	420	480	365	430	325	400	300
Stramit SDU	940	715	815	620	730	555	685	515
Longline 305	1375	1305	1375	1305	1330	1210	1290	1090
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	335	185	290	175	260	160	240	150
KlipLok 700	730	420	630	400	570	355	525	335
KingKlip 700	355	205	310	195	280	175	260	160
Stramit SDU	610	355	525	335	480	300	440	280
Longline 305	1145	930	1145	930	995	805	890	720
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
3. The panels or L-Foot have to be fixed using 1-M8 bolt.
- 4 The above mentioned spacing table is for Roof Interface Bracket fixing including edge of the roof.
5. On purlin means that distance from the purlin to the Klip-Lok type bracket (centre to centre) is not more than 100mm
6. Angle refers to roof angle.
7. For panels lengths upto 1800mm reduce spacings by 12.0%
8. For panels lengths upto 2000mm reduce spacings by 22.0%
9. Spacing applies to roofs with pitch <=10 degrees

Direct Mounting or using L-feet and rails - On top of the purlin

SUMMARY - T.C. 3 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

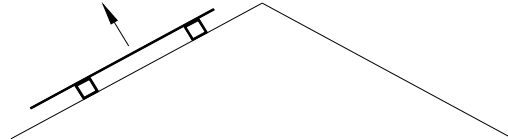
Fixing on purlin on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	1.37
Lysaght 700	1.17
Longline 305	1.76
Stramit SDU	1.80
Fielders 700	0.50

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.8	0.75	0.84	0.84	1.02	0.9	1.1
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1415	1360	1375	1345	1345	1285	1325	1265
KlipLok 700	1415	1360	1375	1345	1345	1225	1325	1150
KingKlip 700	830	665	715	640	640	515	590	490
Stramit SDU	1415	1360	1375	1345	1345	1285	1325	1265
Longline 305	1490	1415	1490	1415	1440	1365	1400	1330
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.4	1.14	1.5
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1345	1265	1300	1165	1275	1040	1255	975
KlipLok 700	1345	1145	1300	995	1185	890	1100	835
KingKlip 700	640	485	555	420	505	375	470	355
Stramit SDU	1345	1265	1300	1225	1275	1195	1255	1175
Longline 305	1375	1305	1375	1305	1330	1260	1290	1145
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1155	665	995	630	900	560	835	525
KlipLok 700	985	570	855	535	770	485	715	450
KingKlip 700	420	240	365	225	325	205	300	185
Stramit SDU	1220	880	1185	835	1155	750	1100	695
Longline 305	1200	975	1200	975	1040	845	930	760
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
3. The panels or L-Foot have to be fixed using 1-M8 bolt.
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5. On purlin means that distance from the purlin to the Klip-Lok type bracket (centre to centre) is not more than 100mm
6. Angle refers to roof angle.
7. For panels lengths upto 1800mm reduce spacings by 12.0%
8. For panels lengths upto 2000mm reduce spacings by 22.0%
9. Spacing applies to roofs with pitch <=10 degrees

Single Tripod and Adjustable Tilting System - Anywhere on the roof

SUMMARY - T.C. 3 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

Fixing anywhere on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	0.40
Lysaght 700	0.87
Longline 305	1.68
Stramit SDU	0.73
Fielders 700	0.43

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.80	0.75	0.84	0.84	1.02	0.90	1.10
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	660	535	575	505	505	415	385	310
KlipLok 700	1415	1165	1250	1110	1110	910	835	675
KingKlip 700	705	575	610	545	545	450	415	335
Stramit SDU	1205	980	1045	930	930	760	705	575
Longline 305	1490	1415	1490	1415	1440	1365	1400	1330
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.40	1.14	1.50
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	515	385	440	335	400	300	375	280
KlipLok 700	1120	855	975	740	880	665	815	620
KingKlip 700	555	420	480	365	430	325	400	300
Stramit SDU	940	715	815	620	730	555	685	515
Longline 305	1375	1305	1375	1305	1330	1220	1290	1100
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	335	185	290	175	260	160	240	150
KlipLok 700	730	420	630	400	570	355	525	335
KingKlip 700	355	205	310	195	280	175	260	160
Stramit SDU	610	355	525	335	480	300	440	280
Longline 305	1220	890	1220	890	1060	780	950	695
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
3. The panels or L-Foot have to be fixed using 1-M8 bolt.
- 4 The above mentioned spacing table is for Roof Interface Bracket fixing including edge of the roof.
5. On purlin means that distance from the purlin to the Klip-Lok type bracket (centre to centre) is not more than 100mm
6. Angle refers to tilt angle between roof and panels – not to horizontal.
7. For panels lengths upto 1800mm reduce spacings by 12.0%
8. For panels lengths upto 2000mm reduce spacings by 22.0%
9. Spacing applies to roofs with pitch <=10 degrees

Single Tripod and Adjustable Tilting System - On top of the purlin

SUMMARY - T.C. 3 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

Fixing on purlin on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	1.37
Lysaght 700	1.17
Longline 305	1.76
Stramit SDU	1.80
Fielders 700	0.50

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.8	0.75	0.84	0.84	1.02	0.9	1.1
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1415	1360	1375	1345	1345	1285	1320	1075
KlipLok 700	1415	1360	1375	1345	1345	1225	1130	920
KingKlip 700	830	665	715	640	640	515	480	385
Stramit SDU	1415	1360	1375	1345	1345	1285	1325	1265
Longline 305	1490	1415	1490	1415	1440	1365	1400	1330
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.4	1.14	1.5
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1345	1265	1300	1165	1275	1040	1255	975
KlipLok 700	1345	1145	1300	995	1185	890	1100	835
KingKlip 700	640	485	555	420	505	375	470	355
Stramit SDU	1345	1265	1300	1225	1275	1195	1255	1175
Longline 305	1375	1305	1375	1305	1330	1220	1290	1040
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1155	665	995	630	900	560	560	525
KlipLok 700	985	570	855	535	770	485	715	450
KingKlip 700	420	240	365	225	325	205	300	185
Stramit SDU	1220	880	1185	835	1155	750	1100	695
Longline 305	1200	975	1200	975	1040	845	900	760
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
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January 2019

Fujian Antai New Energy Tech. Co., Ltd.

Structural Design Summary Table

KLIP-LOC TYPE CLAMP ACCREDITATION WITH TYPE T RAIL

For

Adjustable Triangle, Adjustable Tilt Legs and Direct Mounting
in accordance to AS1170.2 2011 Amdt 5 - June 2017

Terrain Category 2

Direct Mounting or using L-feet and rails - Anywhere on the roof

SUMMARY - T.C. 2 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

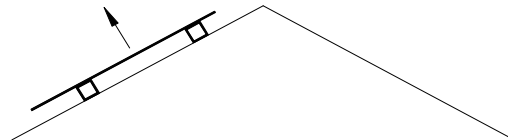
Fixing anywhere on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	0.40
Lysaght 700	0.87
Longline 305	1.68
Stramit SDU	0.73
Fielders 700	0.43

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.80	0.75	0.84	0.84	1.02	0.90	1.10
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	630	505	515	460	470	385	440	355
KlipLok 700	1375	1120	1140	1015	1025	835	970	790
KingKlip 700	675	545	565	495	505	415	480	385
Stramit SDU	1150	940	950	845	855	705	820	665
Longline 305	1485	1405	1355	1290	1325	1205	1305	1130
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.40	1.14	1.50
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	485	365	400	310	365	280	345	260
KlipLok 700	1070	805	880	675	805	610	760	570
KingKlip 700	525	395	430	325	395	300	375	280
Stramit SDU	900	675	740	560	675	505	640	480
Longline 305	1355	1280	1185	960	1070	875	1015	825
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	320	185	260	165	235	150	225	140
KlipLok 700	695	400	570	365	525	325	485	310
KingKlip 700	345	195	280	175	250	160	240	150
Stramit SDU	580	335	480	300	440	270	410	260
Longline 305	1035	825	790	640	715	580	675	545
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
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9. Spacing applies to roofs with pitch <=10 degrees

Direct Mounting or using L-feet and rails - On top of the purlin

SUMMARY - T.C. 2 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

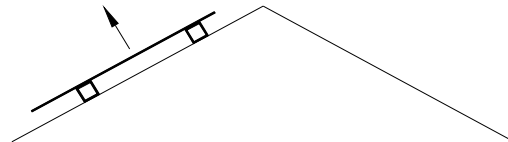
Fixing on purlin on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	1.37
Lysaght 700	1.17
Longline 305	1.76
Stramit SDU	1.80
Fielders 700	0.50

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.8	0.75	0.84	0.84	1.02	0.9	1.1
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1405	1345	1325	1080	1205	980	1140	920
KlipLok 700	1405	1300	1130	920	1025	835	970	790
KingKlip 700	695	545	480	395	430	355	415	330
Stramit SDU	1405	1345	1350	1315	1320	1260	1305	1215
Longline 305	1485	1405	1355	1290	1325	1260	1305	1185
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.4	1.14	1.5
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1325	1050	965	780	875	715	825	665
KlipLok 700	1125	900	825	665	740	610	705	570
KingKlip 700	480	385	345	280	320	250	300	240
Stramit SDU	1330	1250	1270	1035	1145	940	1090	880
Longline 305	1355	1280	1240	1005	1120	910	1060	865
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	1100	640	910	570	825	525	780	495
KlipLok 700	940	545	780	485	705	440	665	420
KingKlip 700	400	235	325	205	300	185	280	175
Stramit SDU	1210	845	1160	760	1090	685	1025	645
Longline 305	1080	865	825	665	740	610	705	570
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
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9. Spacing applies to roofs with pitch <=10 degrees

Single Tripod and Adjustable Tilting System - Anywhere on the roof

SUMMARY - T.C. 2 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

Fixing anywhere on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	0.40
Lysaght 700	0.87
Longline 305	1.68
Stramit SDU	0.73
Fielders 700	0.43

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.80	0.75	0.84	0.84	1.02	0.90	1.10
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	630	505	515	460	470	385	355	290
KlipLok 700	1375	1120	1140	1015	1025	835	780	640
KingKlip 700	675	545	565	495	505	415	385	310
Stramit SDU	1150	940	950	845	855	705	650	535
Longline 305	1485	1405	1355	1270	1325	1160	1305	1090
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.40	1.14	1.50
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	485	365	400	310	365	280	345	260
KlipLok 700	1070	805	880	675	805	610	760	570
KingKlip 700	525	395	430	325	395	300	375	280
Stramit SDU	900	675	740	560	675	505	640	480
Longline 305	1355	1240	1250	920	1145	835	1090	790
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30	≤ 15	≤ 30
KlipLok 406	320	185	260	165	235	150	225	140
KlipLok 700	695	400	570	365	525	325	485	310
KingKlip 700	345	195	280	175	250	160	240	150
Stramit SDU	580	335	480	300	440	270	410	260
Longline 305	1110	800	845	610	760	555	720	525
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
3. The panels or L-Foot have to be fixed using 1-M8 bolt.
- 4 The above mentioned spacing table is for Roof Interface Bracket fixing including edge of the roof.
5. On purlin means that distance from the purlin to the Klip-Lok type bracket (centre to centre) is not more than 100mm
6. Angle refers to tilt angle between roof and panels – not to horizontal.
7. For panels lengths upto 1800mm reduce spacings by 12.0%
8. For panels lengths upto 2000mm reduce spacings by 22.0%
9. Spacing applies to roofs with pitch <=10 degrees

Single Tripod and Adjustable Tilting System - On top of the purlin

SUMMARY - T.C. 2 for Regions A, B, C - Type T Rail

Roof Interface Bracket Spacing (mm) Across for PV – Tripod and Adjustable Tilting System

Fixing on purlin on the Roofing sheet

Two Klip-Lok per frame

Design Data

KlipLok Type	Capacity kN
Lysaght 406	1.37
Lysaght 700	1.17
Longline 305	1.76
Stramit SDU	1.80
Fielders 700	0.50

Panel 'L' 1650



WIND REGION	A							
qu (K Pa)	0.65	0.8	0.75	0.84	0.84	1.02	0.9	1.1
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30
KlipLok 406	1405	1345	1350	1315	1320	1260	1235	1005
KlipLok 700	1405	1345	1350	1315	1320	1130	1055	855
KingKlip 700	790	640	650	580	580	480	440	365
Stramit SDU	1405	1345	1350	1315	1320	1260	1305	1245
Longline 305	1485	1405	1355	1290	1325	1205	1305	1140
Force (kN/m)	0.59	0.73	0.68	0.76	0.76	0.93	0.82	1.00

WIND REGION	B							
qu (K Pa)	0.83	1.09	0.96	1.26	1.06	1.4	1.14	1.5
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30
KlipLok 406	1330	1250	1275	1060	1250	960	1200	910
KlipLok 700	1330	1090	1195	900	1090	815	1025	780
KingKlip 700	610	460	505	385	460	345	430	325
Stramit SDU	1330	1250	1275	1200	1250	1175	1235	1155
Longline 305	1355	1280	1250	965	1200	875	1135	825
Force (kN/m)	0.75	0.99	0.87	1.14	0.96	1.27	1.03	1.36

WIND REGION	C							
qu (K Pa)	1.27	2.19	1.47	2.31	1.63	2.57	1.75	2.75
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30
KlipLok 406	1100	640	910	570	825	525	525	495
KlipLok 700	940	545	780	485	705	440	665	420
KingKlip 700	400	235	325	205	300	185	280	175
Stramit SDU	1210	845	1160	760	1090	685	1025	645
Longline 305	1155	835	880	645	800	580	750	555
Force (kN/m)	1.15	1.99	1.33	2.10	1.48	2.33	1.59	2.50

1. Roof Interface bracket spacing in the above table for panel length of 1.65 m.
2. The table prepared based on GD Rail capacity and Klip-Lok bracket pull-out capacity
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