

Our Ref: 21170

January 2019

Fujian Antai New Energy Tech. Co., Ltd.

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

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

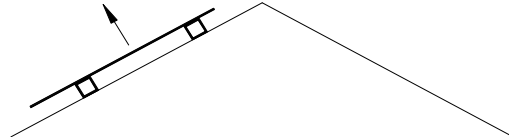
Fixing anywhere on the Roofing sheet

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	655	530	570	505	505	410	475	380
KlipLok 700	1405	1160	1245	1105	1105	905	1035	840
KingKlip 700	700	570	605	540	540	445	505	410
Stramit SDU	1195	970	1035	925	925	755	870	710
Longline 305	1480	1405	1480	1405	1430	1355	1390	1320
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	510	380	435	335	400	295	370	280
KlipLok 700	1110	850	970	735	875	660	810	615
KingKlip 700	550	420	475	360	425	325	400	295
Stramit SDU	930	710	810	615	725	550	680	510
Longline 305	1365	1295	1365	1295	1320	1205	1285	1080
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	285	175	260	155	240	145
KlipLok 700	725	420	625	400	570	355	520	335
KingKlip 700	355	205	305	195	280	175	260	155
Stramit SDU	605	355	520	335	475	295	435	280
Longline 305	1140	925	1140	925	990	800	885	715
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 V Rail

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

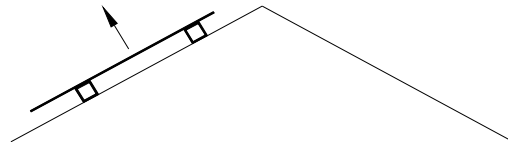
Fixing on purlin on the Roofing sheet

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	1350	1365	1335	1335	1275	1315	1255
KlipLok 700	1405	1350	1365	1335	1335	1215	1315	1140
KingKlip 700	820	660	710	635	635	515	590	485
Stramit SDU	1405	1350	1365	1335	1335	1275	1315	1255
Longline 305	1480	1405	1480	1405	1430	1355	1390	1320
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	1335	1255	1295	1155	1265	1035	1245	970
KlipLok 700	1335	1140	1295	990	1175	885	1090	830
KingKlip 700	635	485	550	420	500	370	465	355
Stramit SDU	1335	1255	1295	1215	1265	1185	1245	1170
Longline 305	1365	1295	1365	1295	1320	1250	1285	1140
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	1145	660	990	625	895	560	830	520
KlipLok 700	980	570	850	530	765	485	710	445
KingKlip 700	420	240	360	220	325	205	295	185
Stramit SDU	1215	875	1175	830	1145	745	1090	690
Longline 305	1195	970	1195	970	1035	840	925	755
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 V 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	655	530	570	505	505	410	380	305
KlipLok 700	1405	1160	1245	1105	1105	905	830	670
KingKlip 700	700	570	605	540	540	445	410	335
Stramit SDU	1195	970	1035	925	925	755	700	570
Longline 305	1480	1405	1480	1405	1430	1355	1390	1320
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	510	380	435	335	400	295	370	280
KlipLok 700	1110	850	970	735	875	660	810	615
KingKlip 700	550	420	475	360	425	325	400	295
Stramit SDU	930	710	810	615	725	550	680	510
Longline 305	1365	1295	1365	1295	1320	1210	1285	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	285	175	260	155	240	145
KlipLok 700	725	420	625	400	570	355	520	335
KingKlip 700	355	205	305	195	280	175	260	155
Stramit SDU	605	355	520	335	475	295	435	280
Longline 305	1210	885	1210	885	1055	775	940	690
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 V 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	1350	1365	1335	1335	1275	1310	1065
KlipLok 700	1405	1350	1365	1335	1335	1215	1120	915
KingKlip 700	820	660	710	635	635	515	475	380
Stramit SDU	1405	1350	1365	1335	1335	1275	1315	1255
Longline 305	1480	1405	1480	1405	1430	1355	1390	1320
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	1335	1255	1295	1155	1265	1035	1245	970
KlipLok 700	1335	1140	1295	990	1175	885	1090	830
KingKlip 700	635	485	550	420	500	370	465	355
Stramit SDU	1335	1255	1295	1215	1265	1185	1245	1170
Longline 305	1365	1295	1365	1295	1320	1210	1285	1035
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	1145	660	990	625	895	560	560	520
KlipLok 700	980	570	850	530	765	485	710	445
KingKlip 700	420	240	360	220	325	205	295	185
Stramit SDU	1215	875	1175	830	1145	745	1090	690
Longline 305	1195	970	1195	970	1035	840	895	755
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 V 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 V Rail

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

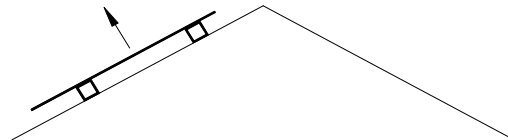
Fixing anywhere on the Roofing sheet

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	625	505	515	455	465	380	440	355
KlipLok 700	1365	1110	1130	1010	1020	830	960	785
KingKlip 700	670	540	560	495	505	410	475	380
Stramit SDU	1140	935	945	840	850	700	810	660
Longline 305	1475	1395	1345	1280	1315	1195	1295	1120
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	360	400	305	360	280	345	260
KlipLok 700	1065	800	875	670	800	605	755	570
KingKlip 700	520	390	425	325	390	295	370	280
Stramit SDU	895	670	735	560	670	500	635	475
Longline 305	1345	1270	1175	950	1065	865	1005	820
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	315	185	260	165	230	145	220	140
KlipLok 700	690	400	570	360	520	325	485	305
KingKlip 700	345	195	280	175	250	155	240	145
Stramit SDU	575	335	475	295	435	270	410	260
Longline 305	1025	820	785	635	710	575	670	540
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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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. 2 for Regions A, B, C - Type V Rail

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

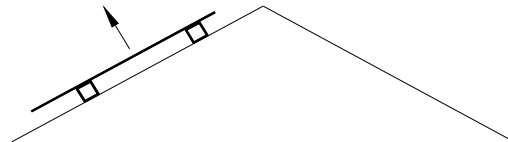
Fixing on purlin on the Roofing sheet

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	1395	1335	1320	1075	1195	970	1130	915
KlipLok 700	1395	1290	1120	915	1020	830	960	785
KingKlip 700	690	540	475	390	430	355	410	325
Stramit SDU	1395	1335	1340	1305	1310	1255	1295	1205
Longline 305	1475	1395	1345	1280	1315	1250	1295	1180
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	1315	1045	960	775	865	710	820	660
KlipLok 700	1120	895	820	660	735	605	700	570
KingKlip 700	475	380	345	280	315	250	295	240
Stramit SDU	1320	1240	1260	1025	1140	930	1080	875
Longline 305	1345	1270	1230	1000	1110	905	1055	855
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	1090	635	905	570	820	520	775	495
KlipLok 700	930	540	775	485	700	435	660	420
KingKlip 700	400	230	325	205	295	185	280	175
Stramit SDU	1200	840	1150	755	1080	680	1015	640
Longline 305	1070	855	820	660	735	605	700	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 V 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	625	505	515	455	465	380	355	290
KlipLok 700	1365	1110	1130	1010	1020	830	775	635
KingKlip 700	670	540	560	495	505	410	380	305
Stramit SDU	1140	935	945	840	850	700	645	530
Longline 305	1475	1395	1345	1260	1315	1150	1295	1085
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	360	400	305	360	280	345	260
KlipLok 700	1065	800	875	670	800	605	755	570
KingKlip 700	520	390	425	325	390	295	370	280
Stramit SDU	895	670	735	560	670	500	635	475
Longline 305	1345	1230	1240	915	1140	830	1080	785
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	315	185	260	165	230	145	220	140
KlipLok 700	690	400	570	360	520	325	485	305
KingKlip 700	345	195	280	175	250	155	240	145
Stramit SDU	575	335	475	295	435	270	410	260
Longline 305	1100	790	840	605	755	550	715	520
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 V 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	1395	1335	1340	1305	1310	1255	1225	1000
KlipLok 700	1395	1335	1340	1305	1310	1120	1045	850
KingKlip 700	785	635	645	580	580	475	440	365
Stramit SDU	1395	1335	1340	1305	1310	1255	1295	1235
Longline 305	1475	1395	1345	1280	1315	1195	1295	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	1.4	1.14	1.5
hz	5 m		10 m		15 m		20 m	
Angle	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30	≤ 15	≤30
KlipLok 406	1320	1240	1265	1055	1240	950	1195	905
KlipLok 700	1320	1080	1185	895	1080	810	1015	775
KingKlip 700	605	455	500	380	455	345	425	325
Stramit SDU	1320	1240	1265	1190	1240	1165	1225	1150
Longline 305	1345	1270	1240	960	1195	865	1130	820
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	1090	635	905	570	820	520	520	495
KlipLok 700	930	540	775	485	700	435	660	420
KingKlip 700	400	230	325	205	295	185	280	175
Stramit SDU	1200	840	1150	755	1080	680	1015	640
Longline 305	1145	830	875	640	790	575	745	550
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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