

SolarRoof Non-Penetrative Flush and Tilt with Elite Rail

Code-Compliant Planning and Installation Guide V2.0
Complying with AS/NZS1170.2:2021



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Introduction

The Clenergy PVezRack® SolarRoof™ has been developed as a universal PV-mounting system for roof-mounting on pitched and flat roofs. The use of patented aluminium base rails, Z-Module technology and telescopic mounting technology eliminates custom cutting and enables fast installation.

Please review this manual thoroughly before installing PVezRack® SolarRoof™. This manual provides:

- 1) Supporting documentation for building permit applications relating to PVezRack® SolarRoof™ Universal PV Module Mounting System,
- 2) Planning and installation instructions.

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The PVezRack® SolarRoof™ parts, when installed in accordance with this guide, will be structurally sound and will meet the AS/NZS1170.2:2021 standard. During installation, and especially when working on the roof, please comply with the appropriate Occupational Health and Safety regulations. Please also pay attention to any other relevant State or Federal regulations. Please check that you are using the latest version of the Installation Manual, which you can do by contacting Clenergy Australia via email on tech@clenergy.com.au, or contacting your local distributor in Australia.

Product Warranty:

Please refer [PVezRack® Product Warranty](#) on our website.

The installer is solely responsible for:

- Complying with all applicable local or national building codes, including any updates that may supersede this manual;
- Ensuring that PVezRack® and other products are appropriate for the particular installation and the installation environment;
- Using only PVezRack® parts and installer-supplied parts as specified by PVezRack® project plan (substitution of parts may void the warranty and invalidate the letter of certification);
- Recycling: Recycle according to the local relative statute;
- Removal: Reverse installation process;
- Ensuring that there are no less than two professionals working on panel installation;
- Ensuring the installation of related electrical equipment is performed by licenced electricians;
- Ensuring safe installation of all electrical aspects of the PV array, This includes adequate earth bonding of the PV array and PVezRack® SolarRoof components as required in AS/NZS 5033: 2021.
- Ensuring that the roof, its rafters/purlins, connections, and other structural support members can support the array under building live load conditions;
- Ensuring that screws to fix interfaces have adequate pullout strength and shear capacities as installed;
Maintaining the waterproof integrity of the roof, including selection of appropriate flashing;
- Verifying the compatibility of the installation considering preventing electrochemical corrosion between dissimilar metals. This may occur between structures and the building and also between structures, fasteners and PV modules, as detailed in AS/NZS 5033: 2021.
- Verifying atmospheric corrosivity zone of installation site by referring to AS 4312-2008 or consulting local construction business to determine appropriate products and installations.

Planning

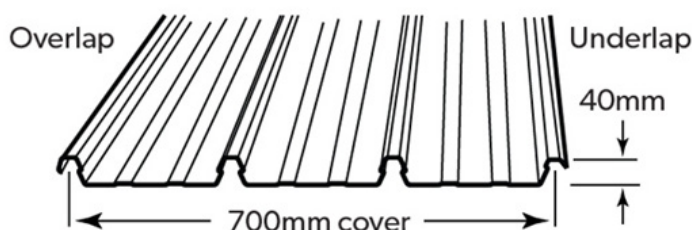
Determine the Type of Concealed Roof

The best way to identify the type of concealed roof installed is to check the label normally located underneath the roofing sheet. Otherwise, you can contact the builder or check the building plan to find out the exact type of the roofing sheet..

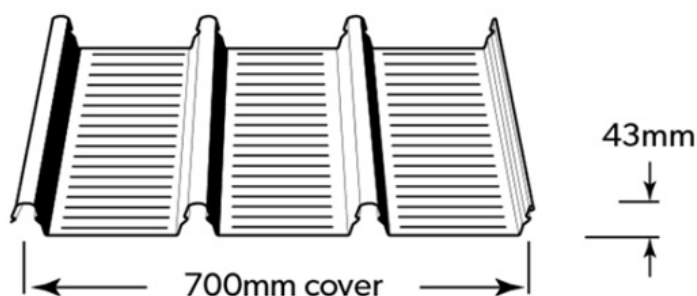
Notes:

- 1) Use of the Clenergy Klip-lok brackets is accredited only on the roof sheet types listed below;
- 2) If the roof sheet type (brand and model) cannot be identified, it is recommended to undertake on-site pull-out capacity test;
- 3) Klip-lok bracket can be direct contact with the majority of roof sheet without use of stand-off material between bracket and roof sheet. Please verify the roof sheet material and its compatibility with bracket (material: anodized aluminium) from the roof sheet manufacturer or refer the Clenergy Technical Bulletin of Dissimilar Metals (available on request) for the details.
- 4) Roof testing of ER-I-34 was completed without using EPDM between roofing sheet and bracket, therefore the generic spacing information for ER-I-34 cannot be applied if EPDM or similar rubber is used between roofing sheet and bracket. In case EPDM or similar rubber is required under Klip-lok bracket for concealed roof installation, please use a different Klip-lok bracket (such as ER-I-09), if this is approved for your specific roofing sheet. An alternative option is to complete a site specific uplift test using ER-I-34 with EPDM based on which a project specific Engineering Certificate can be issued.

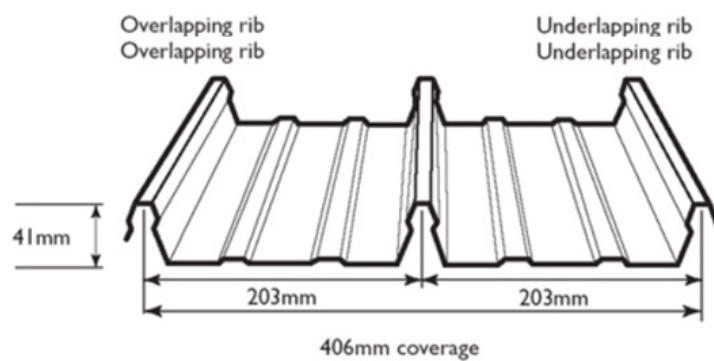
(1) Lysaght Klip Lok 700 Classic (Interface: ER-I-34, ER-I-09)



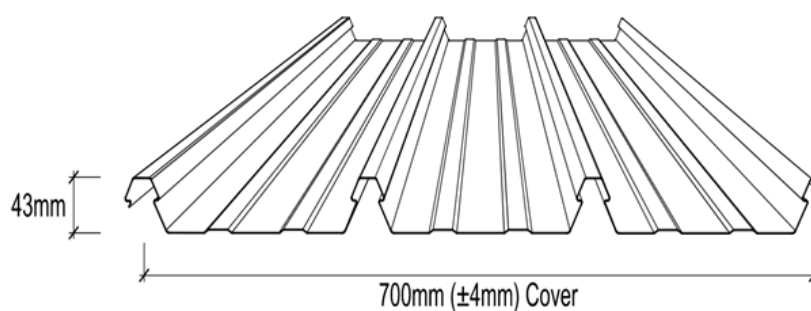
(2) Lysaght Klip-Lok 700 High Strength (Interface: ER-I-34, ER-I-09)



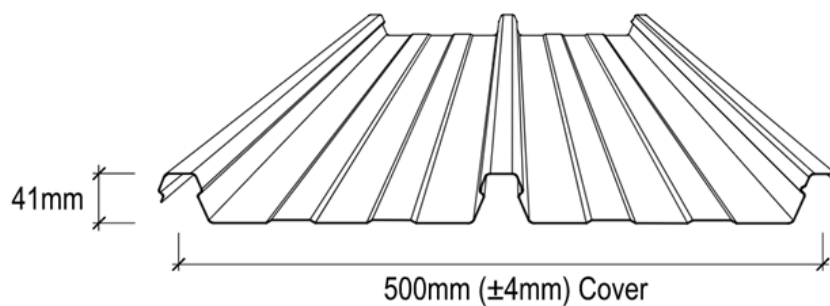
(3) Lysaught Klip-Lok 406 (Interface: ER-I-34, ER-I-32/AU)



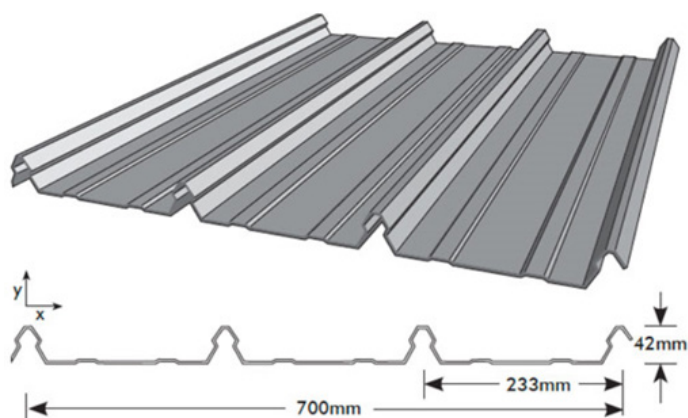
(4) Stramit Speed Deck Ultra (Interface: ER-I-34, ER-I-09)



(5) Stramit Speed Deck 500 (Interface: ER-I-34, ER-I-09)



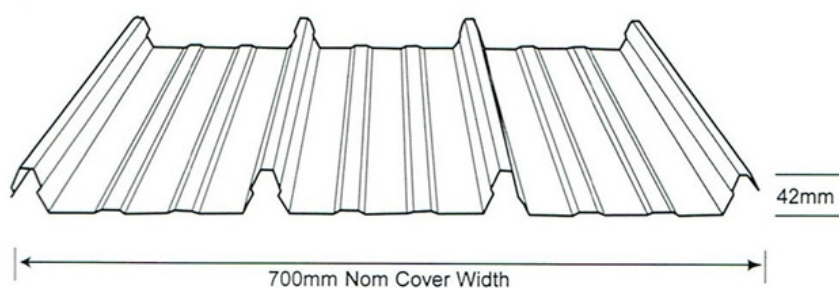
(6) Fielders Kingclip 700 (Interface: ER-I-34, ER-I-09)



(7) Stratco Topdeck 700 (Interface: ER-I-34, ER-I-09)



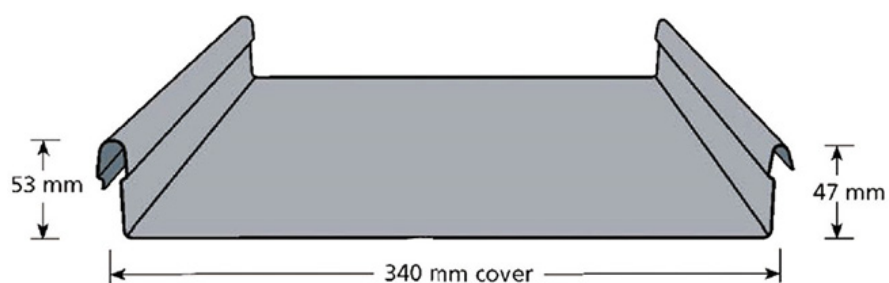
(8) Metroll Metlok 700 (Interface: ER-I-34, ER-I-09)



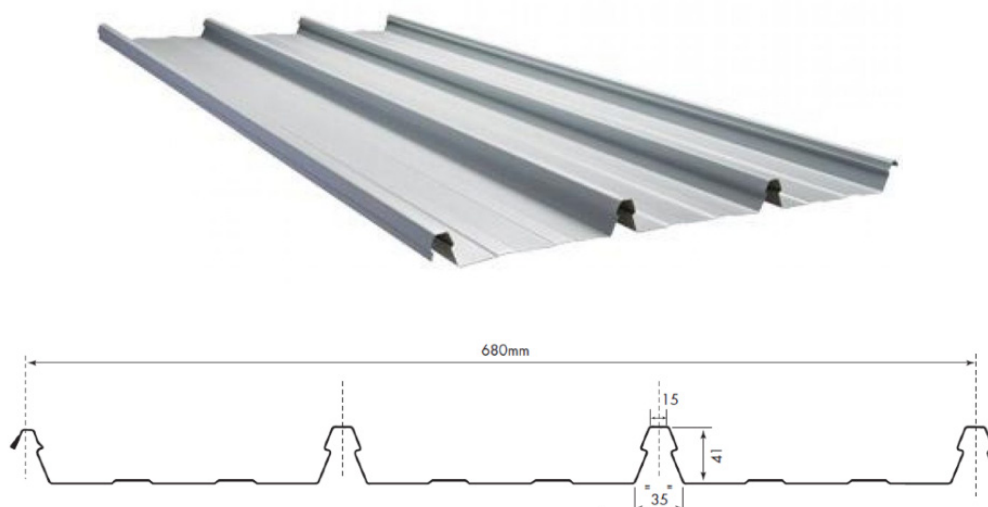
(9) Metroll Metlok 500 (Interface: ER-I-34)



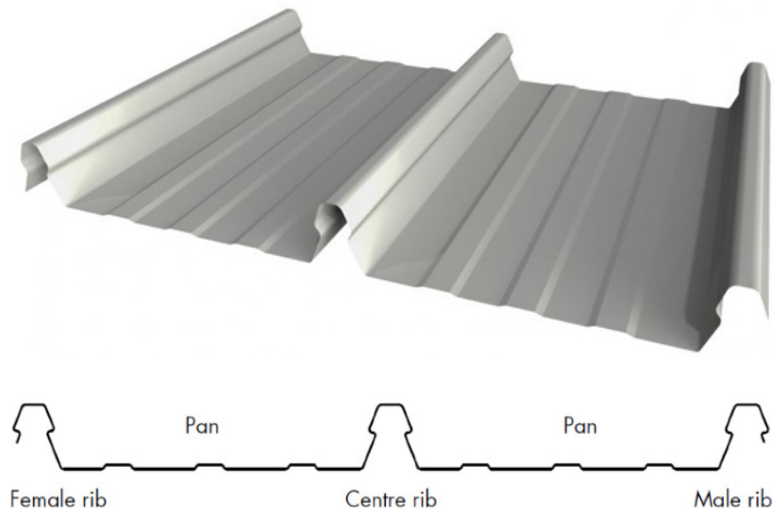
(10) Revolution Maxline 340 (Interface: ER-I-34)



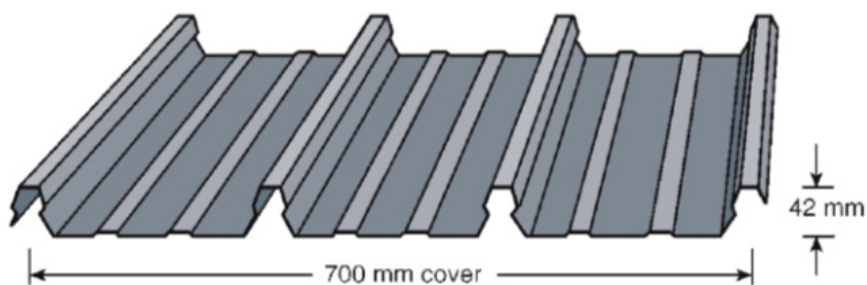
(11) Steeline Lokdek 680 (Interface: ER-I-34)



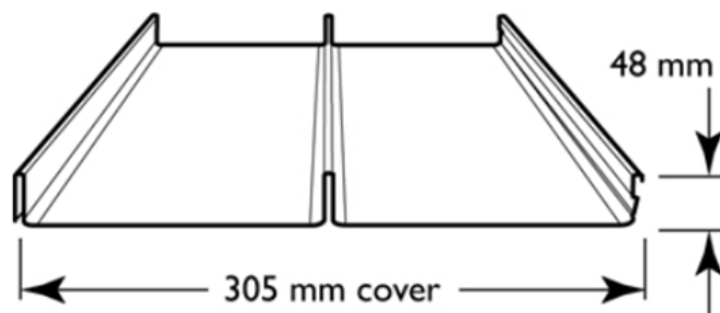
(12) Steeline Steel-Rib 500 (ST28) (Interface: ER-I-34)



(13) Rev-Klip 700 (Interface: ER-I-34)



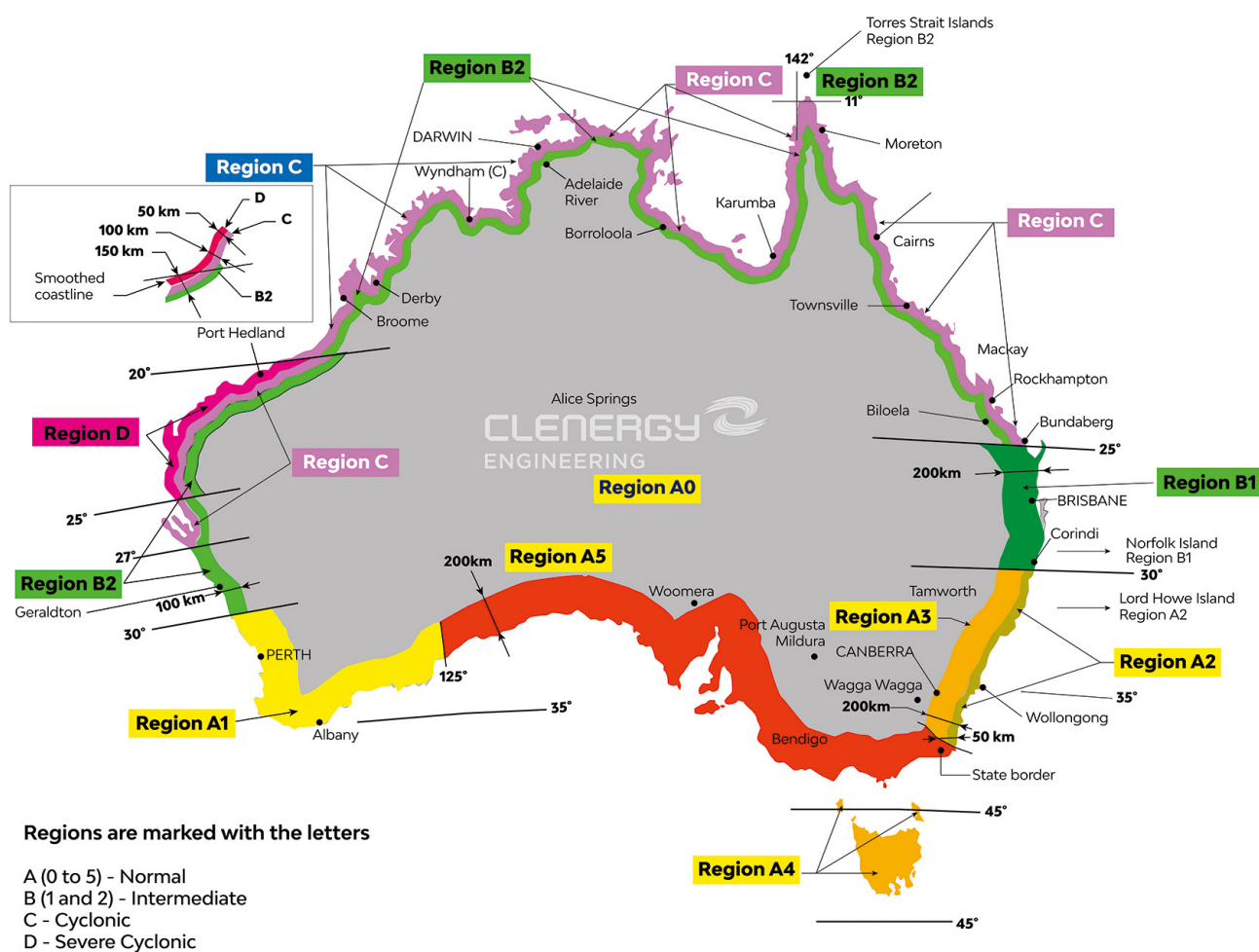
(14) Lysaght LongLine 305 (Interface: ER-I-34, ER-I-29/AU)



Note:

when using ER-I-34 for longline 305 roof sheet installation, please refer to generic note 3 in the engineering letter to apply for interface spacing reduction based on those for ER-I-29/AU.

Determine the wind region of your installation site



Wind Regions – Australia

Wind regions are pre-defined for the whole of Australia by the Australian Standard 1170.2:2021. Comparing to 1170.2:2011, 2021 version has a lot of changes in wind regions.

- Central Australia is now classified as Wind Region A0 and Terrain Classification 2 instead of Wind Region A4.
- Region A1, previously most of the South coast of Australia, now is divided into Regions A1 and A5.
- Tasmania is now Region A4.
- Region B has been divided into regions B1 and B2. This will affect installations in Northern NSW, Gold Coast, Brisbane, Sunshine Coast, and Gladstone.
- Region B1 was increased to include more inland cities around Brisbane. This will likely mean extra structural requirements such as extra rail for installs.

Determine the Terrain Category

It requires to determine the right terrain category to ensure the installation meets the maximum interface spacing specified in the engineering certificate.

In 1170.2-2021, Terrain category 1.5 was removed and Terrain category 2.5 was added. See the definitions below.

Terrain Category 1 (TC1) – Very exposed open terrain with very few or no obstructions, and all water surfaces (e.g. flat, treeless, poorly grassed plains; open ocean, rivers, canals, bays and lakes).

Terrain Category 2 (TC2) – Open terrain, including grassland, with well-scattered obstructions having heights generally from 1.5 m to 5 m, with no more than two obstructions per hectare (e.g. farmland and cleared subdivisions with isolated trees and uncut grass).

Terrain Category 2.5 (TC2.5) – Terrain with some trees or isolated obstructions, terrain in developing outer urban areas with scattered houses, or larger acreage developments with more than two and less than 10 buildings per hectare.

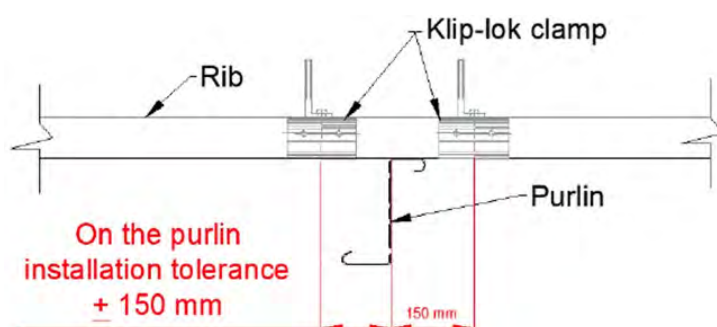
Terrain Category 3 (TC3) – Terrain with numerous closely spaced obstructions having heights generally from 3 m to 10 m. The minimum density of obstructions shall be at least the equivalent of 10 house-size obstructions per hectare (e.g. suburban housing, light industrial estates or dense forests).

Terrain Category 4 (TC4) – Terrain with numerous large, high (10 m to 30 m tall) and closely spaced constructions, such as large city centres and well-developed industrial complexes.

If your installation site is not at TC 2, 2.5 or 3, please contact Clenergy to obtain a project specific engineering certificate to support your installation.

Determine the Installation Area of Roof

It is important to understand installation area of roof for non-penetrative mounting system based on the certification letters, which is installation shall be only on top of the purlins with a maximum tolerance of 150mm. See the sketch below.

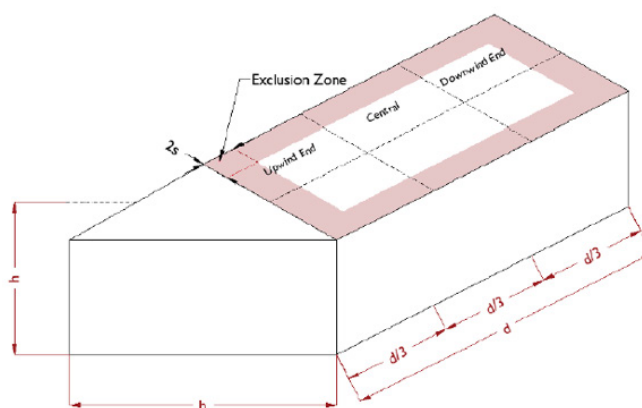


Please refer to "Certification Letters" for roof sheet specific exclusion of installation of the Klip-lok interfaces. For example, for Metroll Metlok 700 roof sheet, Lapjoints installation is excluded.

Regarding roof zones, for flush mount system, there are 3 conditions below to determine 2 roof zones (upwind & downwind and central) installation area of Roof. Please refer to "Non-Penetrative Flush Mount Certificate" for details.

- Roof pitch to be between 1° and 30° .
- $h/d < 0.5$ and $h/b < 0.5$. Being h = height, b = width and d = length of the building as per the below picture.
- Gap between the underside of the panel and the roof to be no less than 50 mm and no more than 300 mm.

There is an Exclusion Zone for flush installation, which is the minimum distance between PV solar panel and roof edge of "2s", where "s" is the gap between the underside of the panel and the roof surface.

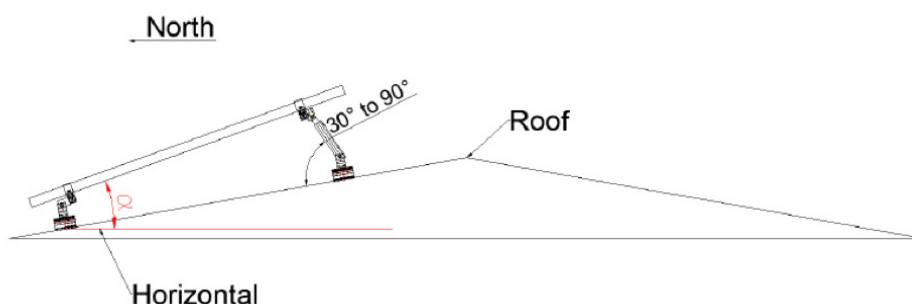


If any of the conditions above is not met, installation area of roof for flush system falls into 4 zones (internal, intermediate, edge and corner) installation. Please refer to "Non-Penetrative Flush and Tilt Mount Certificate" for details.

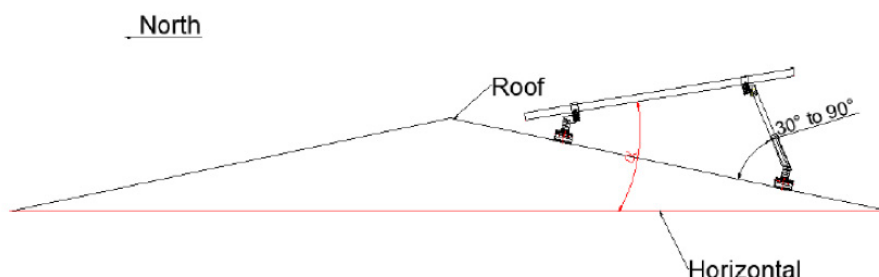
For tilt mount system, installation area of roof always falls into 4 zones. Please refer to "Non-Penetrative Flush and Tilt Mount Certificate" for details.

Determine Roof slope and Tilt Leg Angle

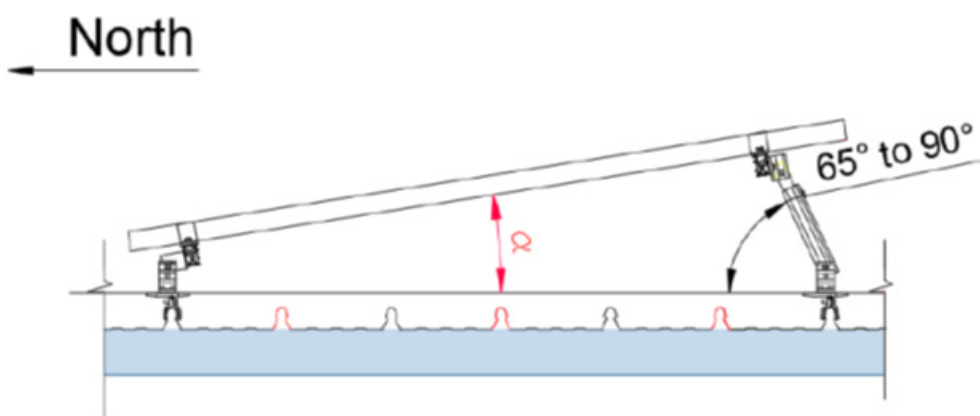
The PVezRack® SolarRoof Flush system can be used for roof slopes up to 30° . Please verify that the Installation site roof slope is between 0° and 30° .



For tilt system, when rails running perpendicular to the ribs, on the north facing roof to make the panels facing the north, the angle of rear leg is between 30° and 90° with the roof plane.



When rails running perpendicular to the ribs, on the south facing roof to make the panels facing the north (reverse tilt), the angle of rear leg is between 30° and 90° with the roof plane as well.



When rails running parallel to the ribs, the angle of rear leg is between 65° and 90° with the roof plane.

Determine the Maximum Rail Support Spacing

Please refer to the Certification Letter and Interface Spacing Table. If a project specific Certification Letter has been provided, please refer to the support spacing in this letter.

Verify Maximum Rail End Overhang

Rail end overhang should be not over 40% of the interface spacing. For example, if the interface spacing is 1500mm, the Rail end overhang can be up to 600mm only.

Acquire PV Modules Clamping Zone Information

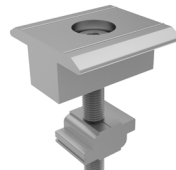
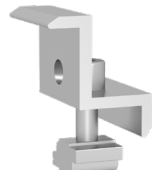
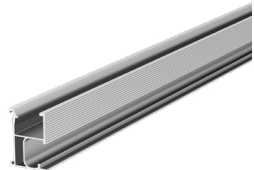
It is recommended to acquire PV modules clamping zone info. from PV modules manufacturer, which can help to plan interfaces positions on the roof and rails orientation and positions.

Tools and Components

Tools

				
Drill Driver (for M8 Hexagon Socket Screw)	Torque Spanner	Tape Measure	String & Marker Pen	Spanner

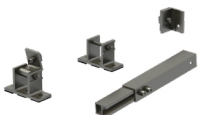
Components

				
ER-EC-ST End Clamp	ER-IC-ST Inter Clamp	C-U/30/46-G Akashi Clamp with Grounding Clip	C-U/30/46 Akashi Clamp	ER-EC-DU35/40 End Clamp, Dual 35 or 40mm
				
ER-EC-DU40/46 End Clamp, Dual 40 or 46mm	ER-R-ELT Elite Rail	ER-SP-ECO Splice for ECO-Rail	ER-SP-ELT Splice for Elite Rail	ER-CAP-ELT Cap for Elite Rail

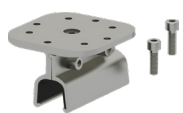
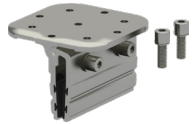
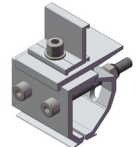
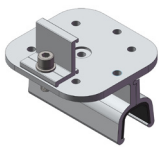
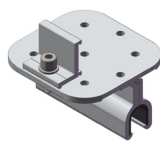
- Flush mount component

				
ER-I-05 Tin Interface	ER-I-05/CM Tin Interface with Click Module	ER-I-05A/EZC/ECO Tin Interface A with ezClick connection	CRC-R/ECO Cross Connector Clamp of ECO-Rail	K-CRC/PT Cross Connector Clamp and Plate Kit

- Tilt mount component

			
ER-TL-10/15 ER-TL-15/30 ER-TL-30/60 Adjustable Tilt legs, non-preassembly	ER-TL-10/15/PS ER-TL-15/30/PS Adjustable Tilt legs, preassembly	TL-10/15/L/PS TL-15/30/L/PS Adjustable Tilt Legs with L-feet, preassembly	ER-TL-5/PS ER-TL-10/PS Fixed Tilt Legs, preassembly

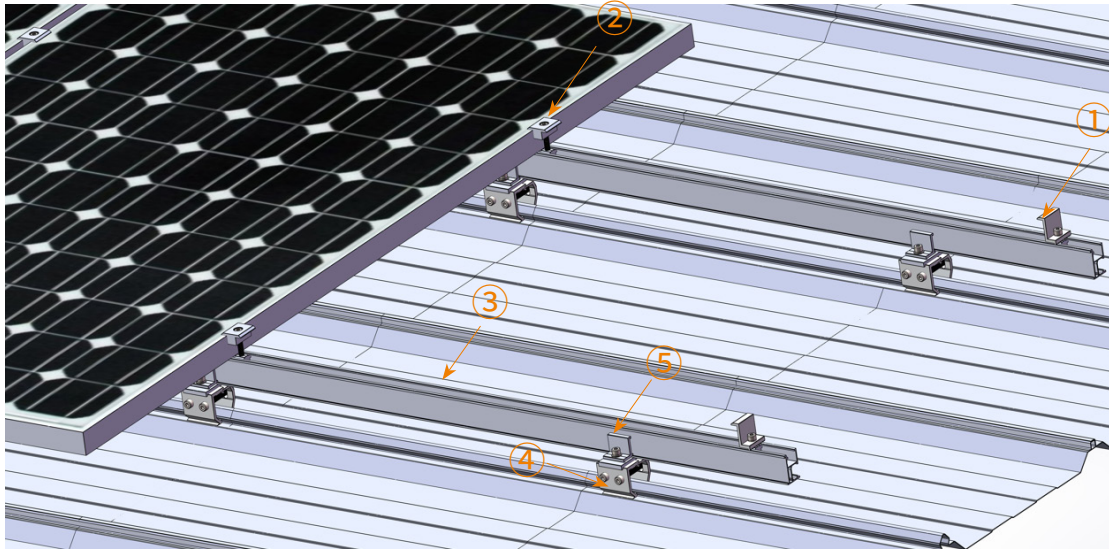
- Applicable Klip-lok Interfaces

				
ER-I-34 Brooklyn Klip-lok Interface	ER-I-34/CRC Brooklyn Klip-lok Interface pre-assembly with Cross Connector Clamp	ER-I-09 Klip-lok Interface 700	ER-I-32/AU Klip-lok Interface 406	ER-I-29/AU Klip-lok Interface for longline 305
				
ER-I-34/05A/EZC Brooklyn Klip-lok Interface pre-assembly with Tin Interface A with ezClick module	ER-I-34/CRC/PT Brooklyn Klip-lok Clamp pre-assembly with Cross Connector Clamp and Plate Kit	ER-I-09/CRC Klip-lok Interface 400-700HS, pre-assembly with Cross Connector Clamp	ER-I-32/CRC Klip-lok Interface 406, pre-assembly with Cross Connector Clamp	

System Overview

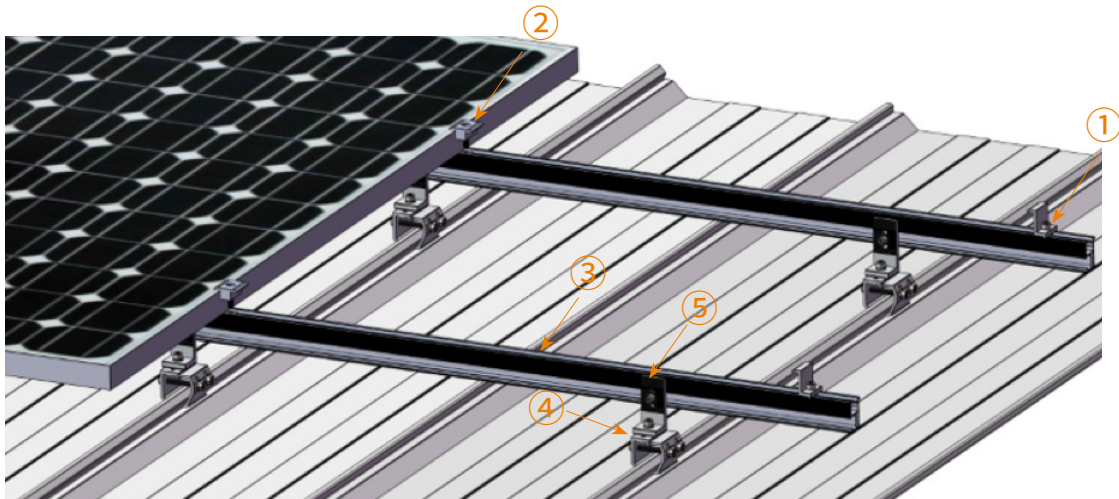
Overview of PVezRack SolarRoof Non-Penetrative

With Cross Connector Clamp (use Brooklyn Klip-lok Interface as an example)



- 1. End Clamp 2. Inter Clamp 3. Elite Rail 4. Brooklyn Klip-lok Interface
- 5. Cross Connector Clamp and Plate Kit

With Tin Interface (use Brooklyn Klip-lok Interface as an example)



- 1. End Clamp 2. Inter Clamp 3. Elite Rail 4. Brooklyn Klip-lok Interface 5. Tin Interface

With Adjustable Tilt Legs



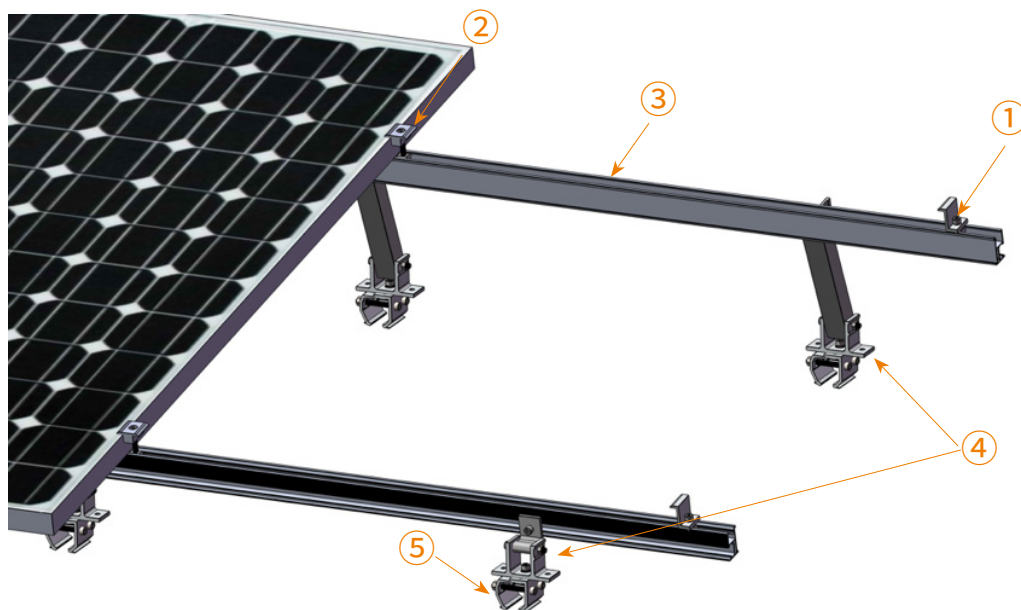
1. End Clamp 2. Inter Clamp 3. Elite Rail 4. Adjustable Tilt Legs 5. Brooklyn Klip-lok Interface

With Adjustable Tilt Legs with L-feet



1. End Clamp 2. Inter Clamp 3. Elite Rail 4. Adjustable Tilt Legs 5. Brooklyn Klip-lok Interface

With Fixed Tilt Legs



1. End Clamp 2. Inter Clamp 3. Elite Rail 4. Fixed Tilt Legs 5. Brooklyn Klip-lok Interface

Precautions during Stainless Steel Fastener Installation

Improper operation may lead to deadlock of Nuts and Bolts. The steps below should be applied to stainless steel nut and bolt assembly to reduce this risk.

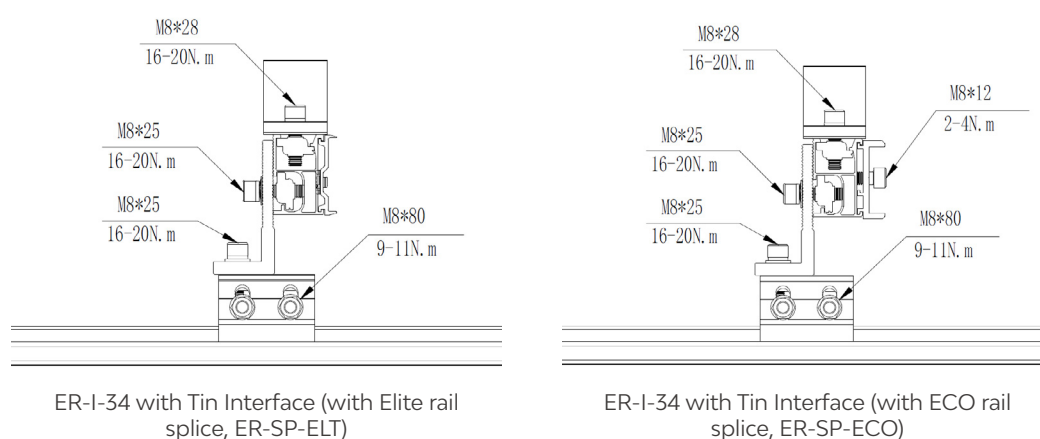
General installation instructions

- (1) Apply force to fasteners in the direction of thread
- (2) Apply force uniformly, to maintain the required torque
- (3) Professional tools and tool belts are recommended
- (4) In some cases, fasteners could be seized over time. As an option, if want to avoid galling or seizing of thread, apply lubricant (grease or 40# engine oil) to fasteners prior to tightening.

Safe Torques

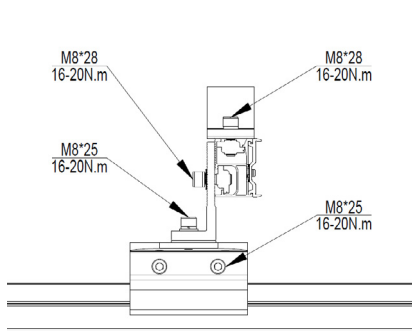
Please refer to safe torques defined in this guide as shown in the figures below. In case power tools are required, Clenergy recommends the use of low speed only. High speed and impact drivers increase the risk of bolt galling (deadlock) If deadlock occurs and you need to cut fasteners, ensure that there is no load on the fastener before you cut it. Avoid damaging the anodized or galvanized surfaces.

Flush Mount

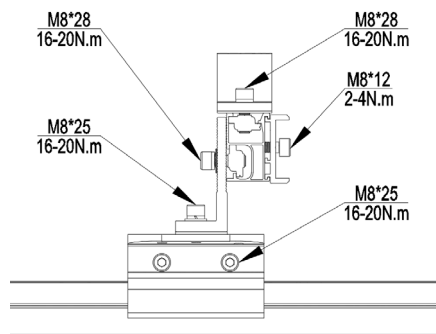


Note:

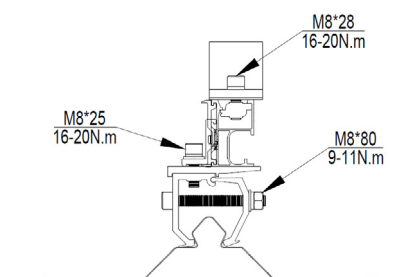
When clamping Lysaght LongLine 305 with ER-I-34, the torque shall be 13-17 N.m.



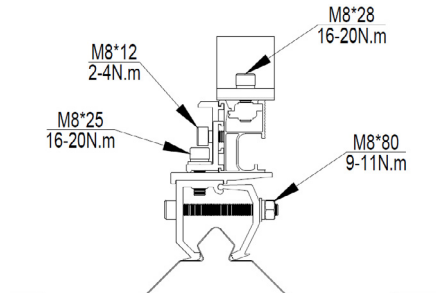
ER-I-09, ER-I-29/AU or ER-I-32/AU with Tin Interface
(with Elite rail splice, ER-SP-ELT)



ER-I-09, ER-I-29/AU or ER-I-32/AU with Tin Interface
(with ECO rail splice, ER-SP-ECO)



ER-I-34 with Cross Connector Clamp (with Elite rail
splice, ER-SP-ELT)



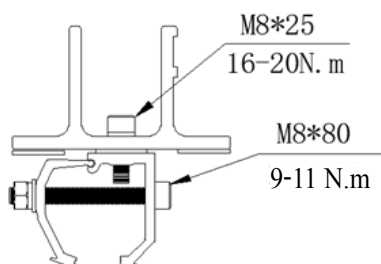
ER-I-34 with Cross Connector Clamp (with ECO rail
splice, ER-SP-ECO)

Note:

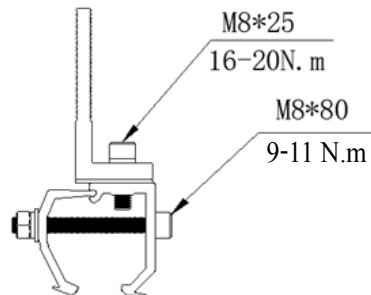
When clamping Lysaght LongLine 305 with ER-I-34, the torque shall be 13-17 N.m.

Tilt Mount

(1) Klip-lok Interface



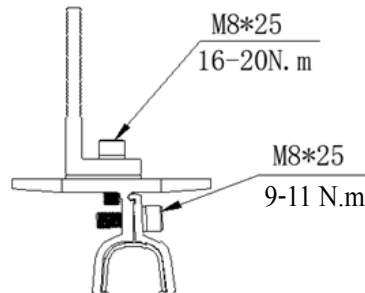
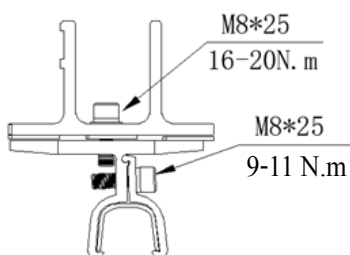
ER-I-34 with Tilt Legs



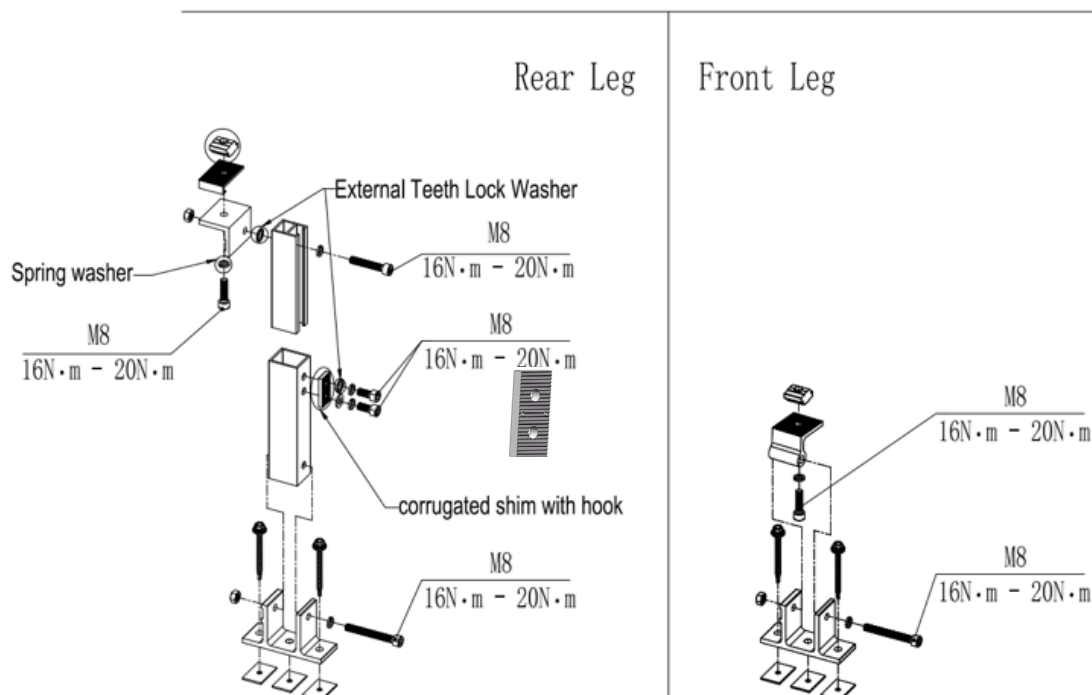
ER-I-34 with L feet Tilt Legs

Note:

When clamping Lysaght LongLine 305 with ER-I-34, the torque shall be 13-17 N.m.



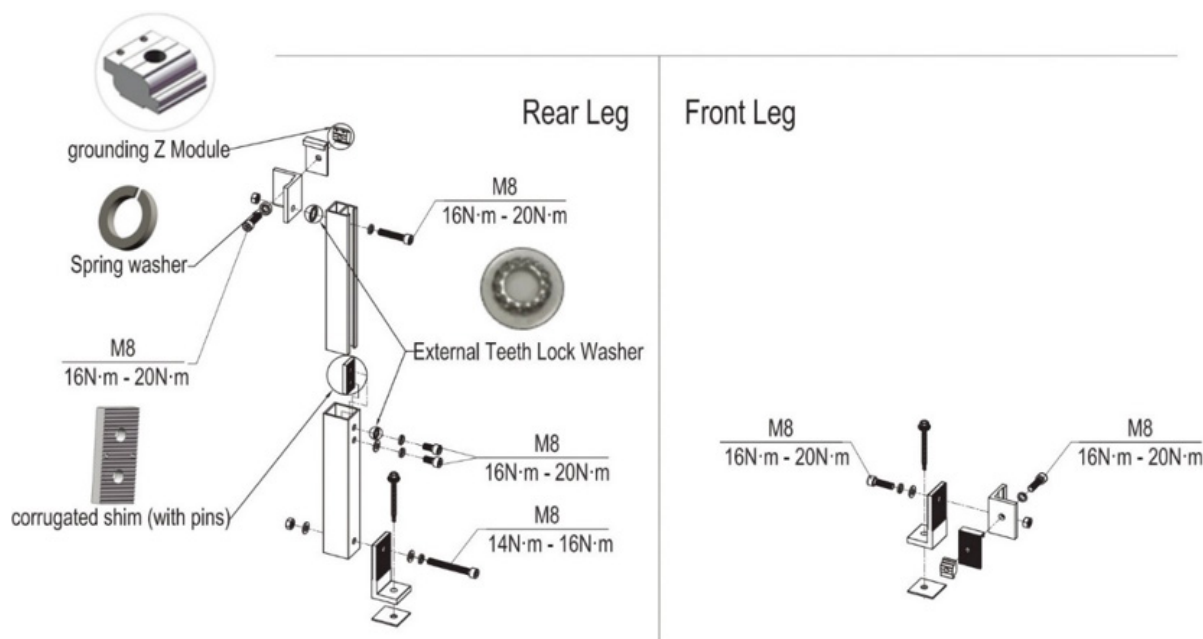
(2) Adjustable Tilt Legs



Note:

Grounding Z Module, External Teeth Lock Washers, Spring washer and corrugated shim (with pins) on the diagram above are to create the electrical continuity between rail and rear leg tubes.

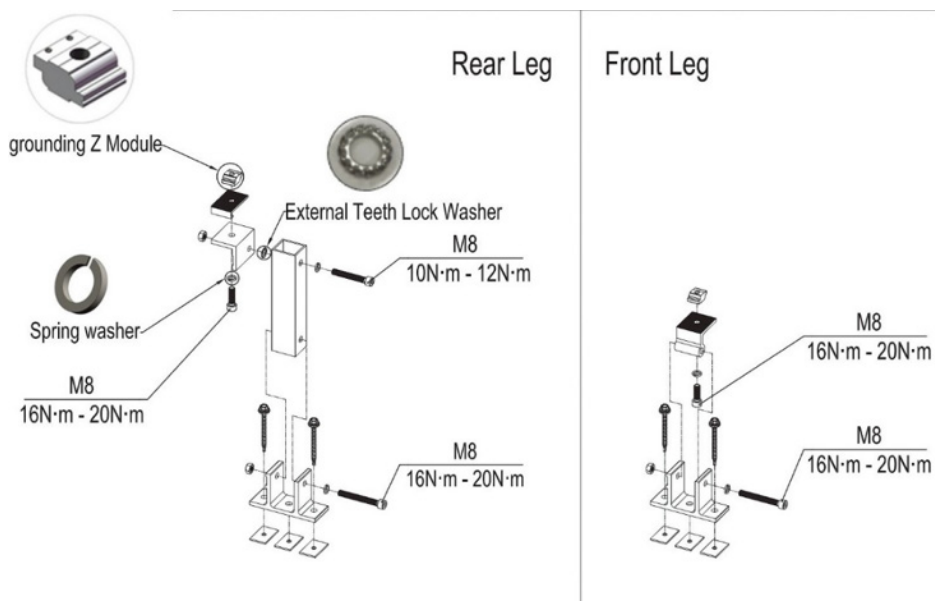
(3) Adjustable Tilt Legs with L-feet



Note:

Grounding Z Module, External Teeth Lock Washers, Spring washer and corrugated shim (with pins) on the diagram above are to create the electrical continuity between rail and rear leg tubes.

(4) Fixed Tilt Legs



Note:

Grounding Z Module, External Teeth Lock Washer and Spring washer on the diagram above are to create the electrical continuity between rail and rear leg tubes.

Installation Instructions

Brooklyn Klip-lok Interface Installation

According to your plan, fix the Brooklyn Klip-lok Interface on the ribs of metal sheet. Fasten the bolts of the Brooklyn Klip-lok Interface within 9-11 N.m (except Lysaght LongLine 305) after adjusted properly.

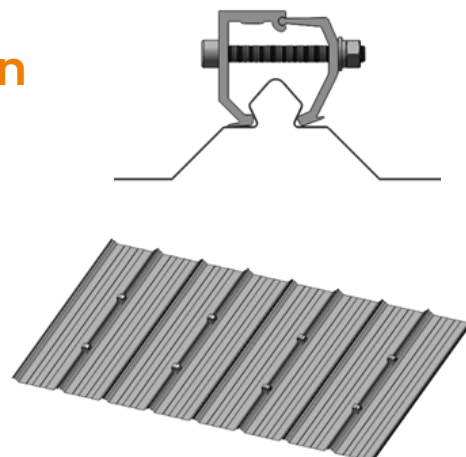
Recommended Installation Method

Step 1. Set the low-range torque wrench value to 11 N.m. Hold a nut with a spanner and fasten a bolt to 11 N.m with the Torque Wrench.

Step 2. Hold the other nut and fasten the other bolt to 11 N.m. with the torque wrench.

Check Fasteners Torque Method

Set the torque wrench value to 9 N.m. and check fasteners torque in the fastening direction. If one or another fastener does not reach 9 N.m., fasten them to 9 N.m.



Cross Connector Clamp & Tin Interface Installation

When using Cross Connector Clamp, fix the Cross Connector Clamp on the top face (side hole only) of the Brooklyn Klip-lok Interface. Fasten the bolt of the Cross Connector Clamp slightly before installing the Elite-Rail. Please note the rails can run perpendicular to ribs only.

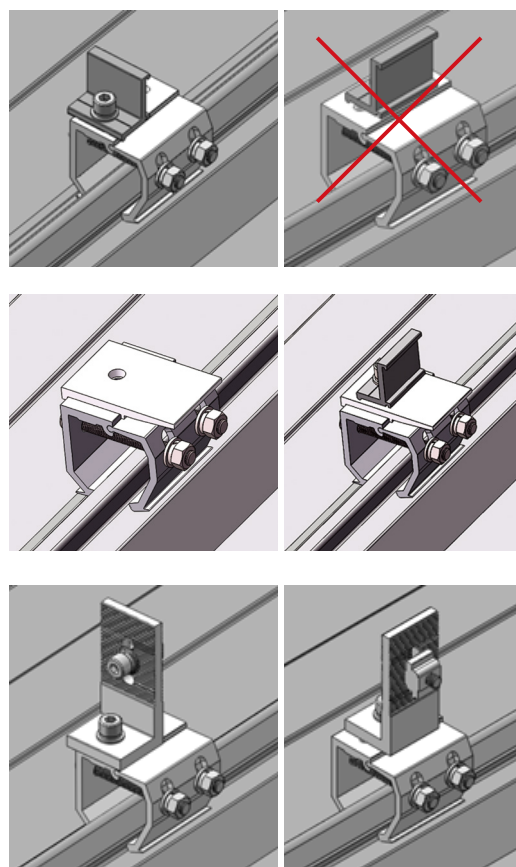
Cross Connector Clamp and Plate Kit (K-CRC/PT) provides an option of running rails parallel to ribs. Place the Cross Connector Clamp Plate aligning on the central hole of the Brooklyn Klip-lok Clamp.

Fix the Cross Connector Clamp on the Plate. Fasten the bolt of the Cross Connector Clamp slightly before installing the Elite-Rail.

When using Tin Interface, fix the Tin Interface on the top face of the Brooklyn Klip-lok Interface, fasten the Tin Interface and the Brooklyn Klip-lok Interface using M8 bolt within 16-20N.m after adjusted properly.

Note:

Pre-fitted rubber pad (if applicable) at the bottom surface of Tin Interface shall be taken off to avoid rubber aging effect on fastener torque.

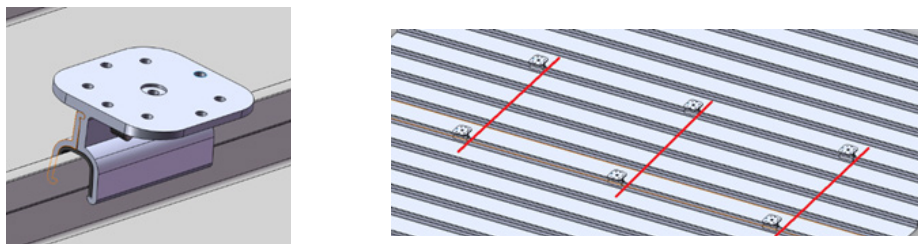


Other Klip-lok Interface Installation

According to the installation plan, after determining the position of the first Klip-lok Interface, fix it on the rib of tin roof and fasten lightly.

Recommended torque for M8 bolts is 16-20N·m.

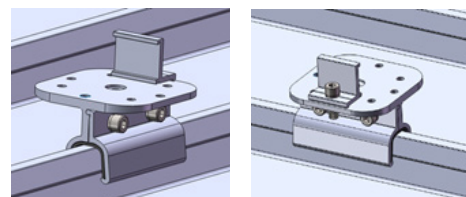
Fix the other Klip-lok Interfaces on the tin roof with the string as shown in the figures below.



Cross Connector Clamp & Tin Interface Installation

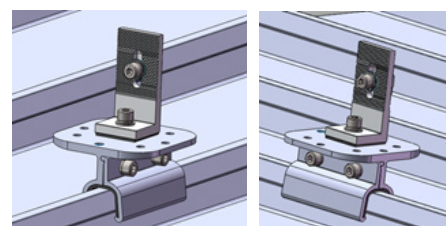
When using the Klip-lok Interface and Cross Connector Clamp, please install according to the steps below:

Fix all Cross Connector Clamp in the middle hole or side hole of the Klip-lok Interface, do not fasten tightly as shown in the figure on the right.



When using the Klip-lok Interface and Tin Interface, please install according to the steps below:

Install all the Tin Interfaces on the middle hole of Klip-lok Interface, do not fasten tightly as shown in the figure on the right.



Note:

Pre-fitted rubber pad (if applicable) at the bottom surface of Tin Interface shall be taken off to avoid rubber aging effect on fastener torque.

Tilt Leg (Front & Rear Leg) Installation

Front Leg Installation

According to the installation plan, determine the mounting position and direction of the front legs. See Front Leg installation with Klip-lok Interface in Figures 5.3a and 5.3b. Tin foot front leg installation is in Figures 5.3c and 5.3d.

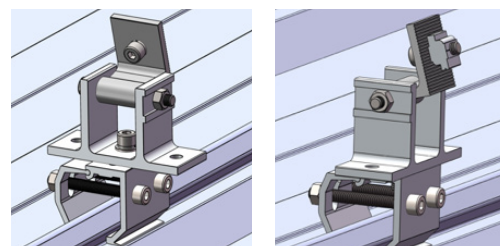


Figure 5.3a
Front Leg Installation with Brooklyn Klip-lok Interface

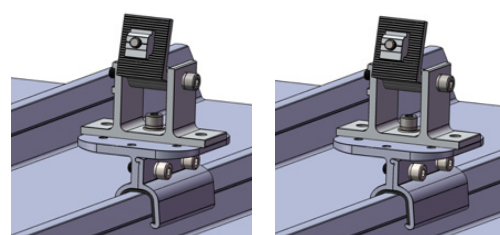


Figure 5.3b
Front Leg Installation with Other Klip-lok Interface

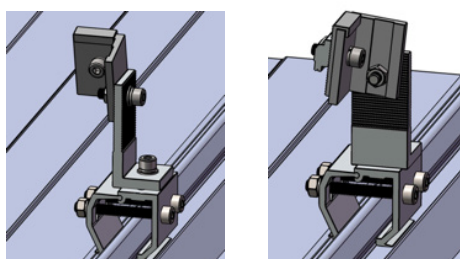


Figure 5.3c
Tin Foot Front Leg Installation with Brooklyn Klip-lok Interface

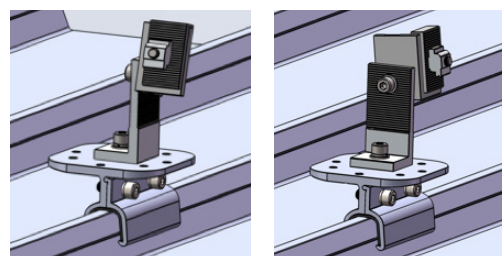


Figure 5.3d
Tin Foot Front Leg Installation with Other Klip-lok Interface

Rear Leg Installation

According to the installation plan, after confirming the length L of the Rear Leg, fasten M8*12 bolts as shown in Figure 5.3e .

Recommended torque for M8*12 bolts is 18~20 N·m

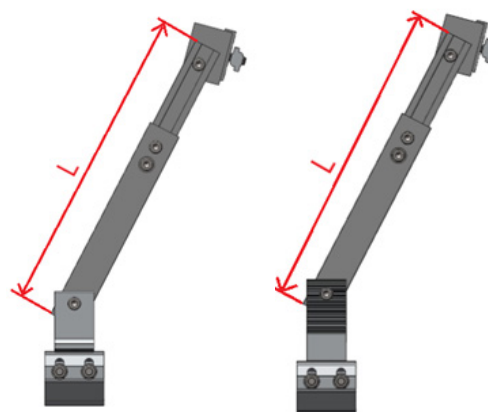


Figure 5.3e

Note:

It is not necessary to use two bolts connection between Klip-lok Interface and rear leg as one bolt fixing through the middle hole of rear leg provides sufficient structural capacity.

Pre-fitted rubber pads (if applicable) at the bottom surface of Rear Leg shall be taken off to avoid rubber aging effect on fastener torque.

According to the installation plan, using preassembly or non-preassembly rear legs will make installation steps a bit different. See the installation images in Figures 5.3f - 5.3j.

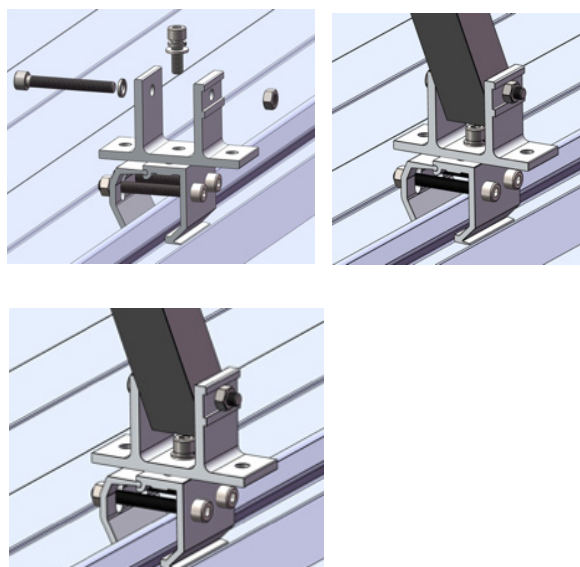


Figure 5.3f
Non-preassembly Rear Leg Installation with
Brooklyn Klip-lok Interface

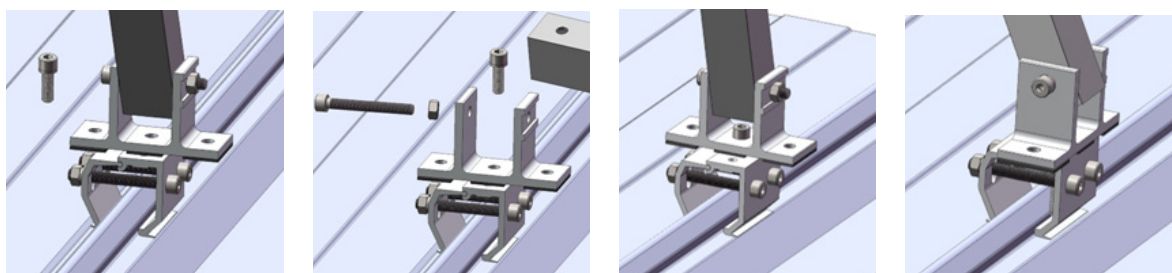


Figure 5.3g
Preassembly Rear Leg Installation with Brooklyn
Klip-lok Interface

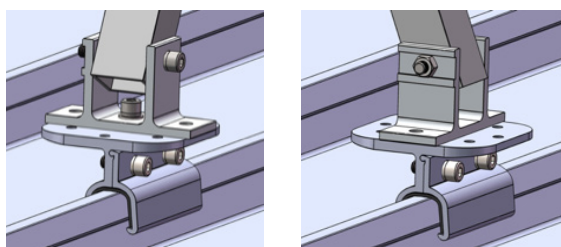


Figure 5.3h Rear Leg Installation with Other Klip-lok Interface

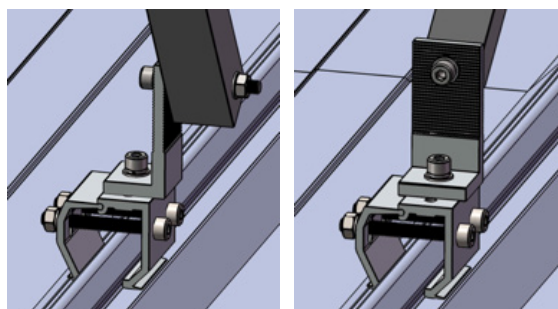


Figure 5.3i Tin Foot Rear Leg Installation with Brooklyn Klip-lok Interface

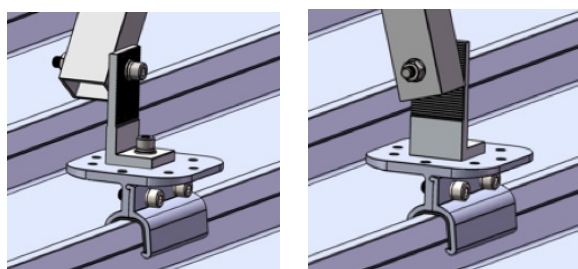


Figure 5.3j Tin Foot Rear Leg Installation with Other Klip-lok Interface

Install the remaining Front and Rear Legs as shown in Figure 5.3k.

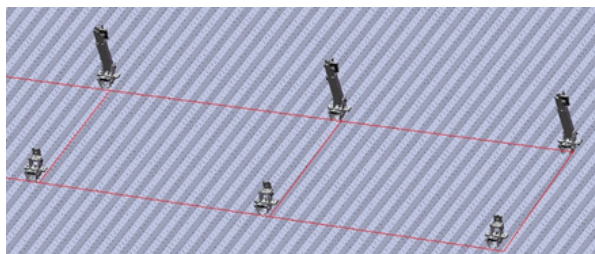
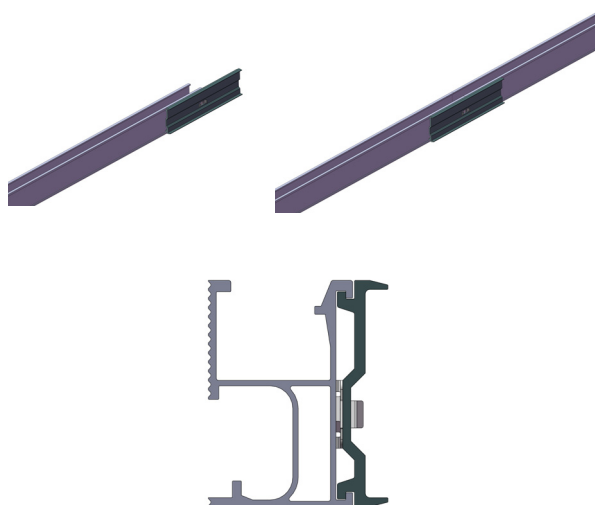


Figure 5.3k

Rail Installation

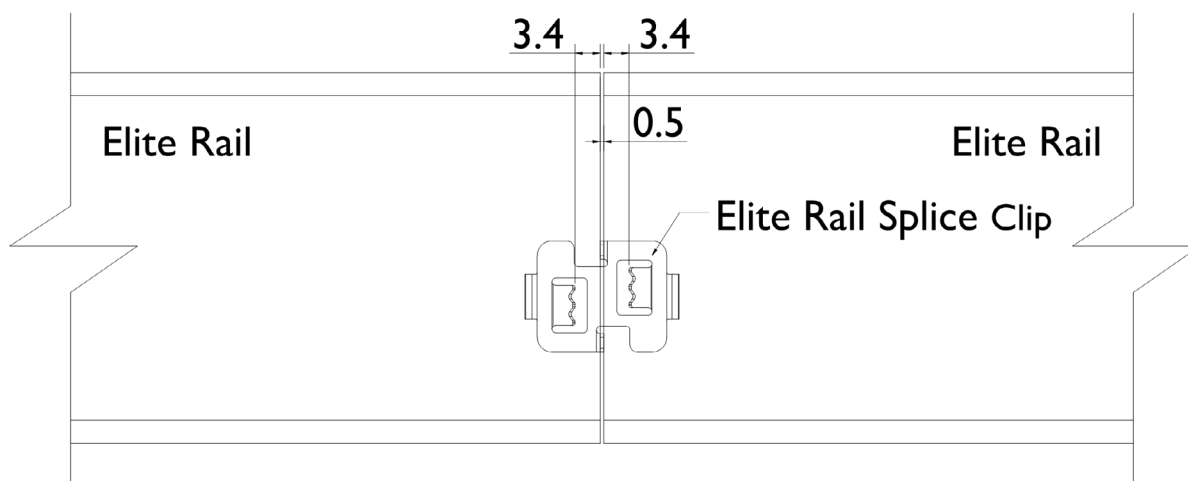
- Option 1: Using Elite Rail Splice (ER-SP-ELT)

To connect several rails together, slide half of the splice into the rear side of the rail. The connection clip of splice can make self-locking with the rail without using any tool. Slide the next rail into the splice to complete two rails connection. The sharp teeth of connection clip of splice can provide the earthing continuity between two rails. This eliminates the need of using 2 grounding lugs.



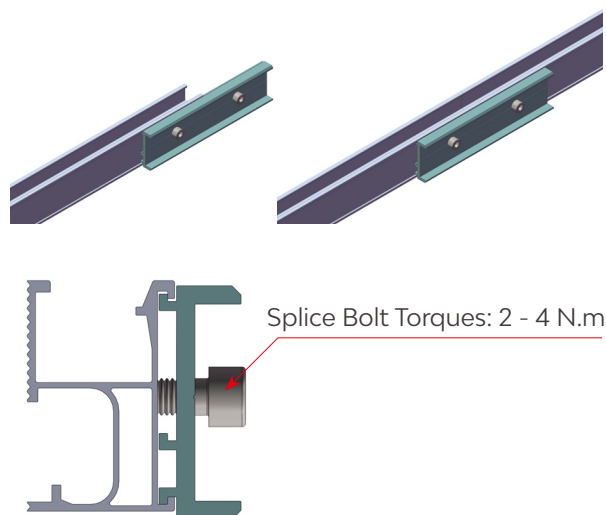
Elite-rail installation with Elite rail splice

In case of requiring rails cutting to be joined by Elite rail splice, please make sure cutting as straight as possible to avoid splice clip teeth mistouching rails. It is because after installation it is just 3.4 mm from the rail end to the clip teeth as shown in the diagram.

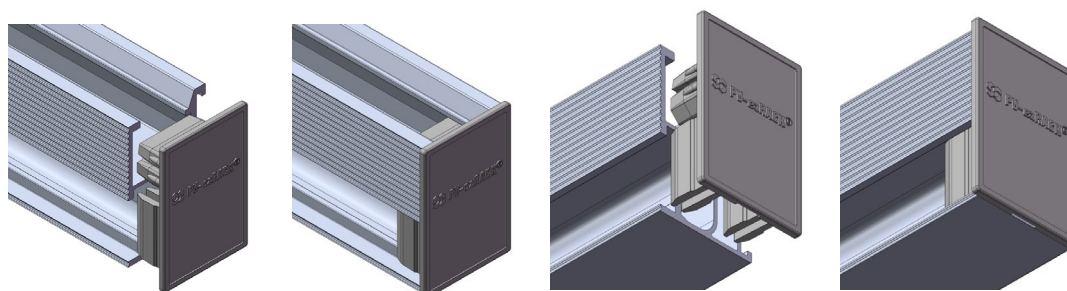


• Option 2: Using ECO Rail Splice (ER-SP-ECO)

ECO rail splice can be used for connecting Elite rails. To connect several rails together, slide half of the splice into the rear side of the rail. Fasten the first M8 bolt with torque of 2 ~ 4 Nm and slide the next rail into the splice and fasten the second M8 bolt with torque of 2 ~ 4 Nm. The low torque is not to impact the structural integrity of the system as the defined 2 ~ 4 N.m. Torque is sufficient to secure the required positioning of the splice for the design life of the system, and can provide the earthing continuity between two rails through the bolts and splice. This eliminates the need of using 2 grounding lugs.



Elite-rail installation with ECO rail splice

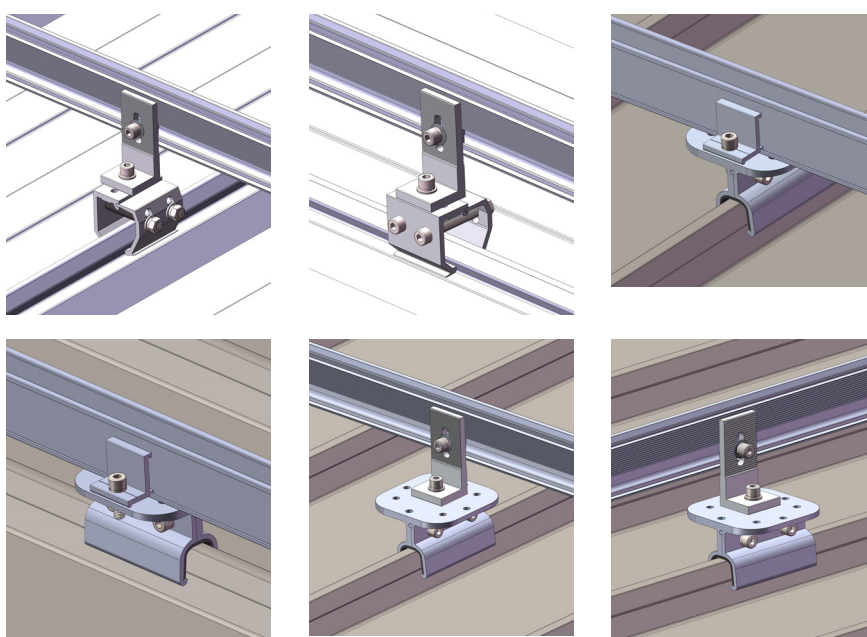
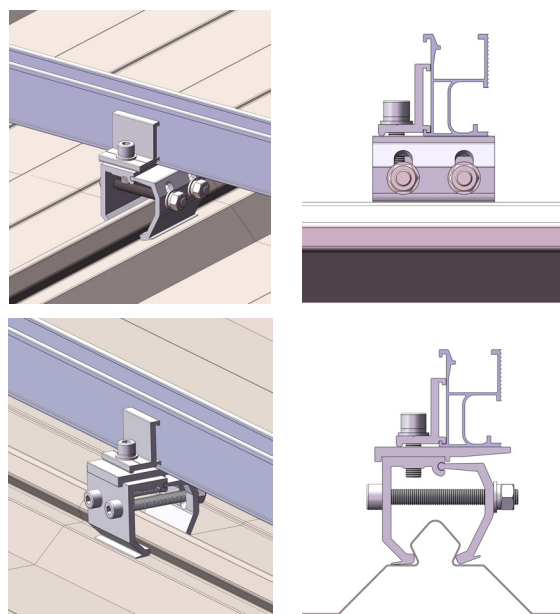


When installing Elite rail end cap, align the cap with the end of the Elite rail and firmly press and secure it in place.

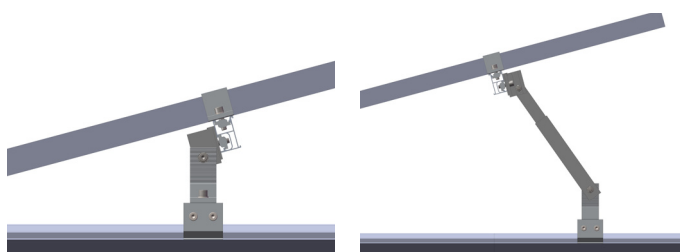
If the rails consist of different lengths, always begin with the shortest piece.

When using Rail Clamp, place the Elite-Rail on the Klip-lok Interface, uplift the Rail Clamp and click it into the side channels of the Elite-Rail as shown in the right figure. Fasten the Rail Clamp within 16-20 N.m after the Rail is positioned properly.

When using Tin Interface, fix the Elite-Rail and Tin Interface as shown in the right figure and then fasten within 16-20 N.m. after Rail is positioned properly



Tilt Leg installation as shown in the right figures.



PV Module Installation

- 1) Please refer [PVezRack® Grounding System](#) for PV modules clamps and grounding lugs installations.
- 2) The installers must ensure panel clamps are installed flush mounted to the panel frame and apply correct torque value of clamp fastener as shown in section "Safe Torques (Page 16)".

Non-Penetrative Flush Mount Certification Letter



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ABN 37 605 815 585

13 September 2023

Clenergy Australia
1/10 Duerdin Street
Clayton, VIC 3168

CERTIFICATION LETTER

Clenergy PV-ezRack SolarRoof Klip-lok Flush interface certification (Elite Rail) – TC2, 2.5, 3 – Wind Region A, B1, B2
C and D - Internal REF: **00606-ELT**. Project REF: **CL-1172-Y.REV.1**.

MW Engineering Melbourne, being Structural Engineers within the meaning of Australian regulations, have calculated the maximum spacings for the PV ez-Rack rail system for the following conditions:

- **Wind Loads to AS 1170.2-2021**
 - o Wind Terrain Category 2, 2.5 and 3
 - o Wind average recurrence of 200 years
 - o Wind Region A, B1, B2, C and D
- Solar panel length up to 2.4 m
- Solar panel width up to 1.2 m

Attached are the tables showing the spacings according to Wind Region, roof pitch, and building height.

The values shown on these tables will be valid unless an amendment is issued on any of the following codes:

- | | |
|-----------------------------------|--------------------|
| - AS/NZS 1170.0- 2002 AMDT 4-2016 | General Principles |
| - AS/NZS 1170.1- 2002 AMDT 4-2016 | Imposed Loadings |
| - AS/NZS 1170.2- 2021 | Wind Loadings |
| - AS/NZS 1664.1- 1997 AMDT 1:1999 | Aluminium Code |

Should you have any queries, do not hesitate to contact us.

Best Regards,



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September 2023

STRUCTURAL DESIGN CERTIFICATION



Klip-lok Flush Interface spacing tables (Elite Rail)

Standard: AS/NZS 1170.2:2021

Terrain Category: 2, 2.5 & 3

Client: Clenergy Australia

REF: 00606-ELT

Date: SEPTEMBER 2023

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Clenergy reference: CL-1172-Y. REV.1

Project: PV-ezRack SolarRoof Klip-lok flush interface spacing tables (Elite-Rail)

Australian Standards

AS/NZS 1170.0:2002 (R2016)

AS/NZS 1170.1:2002 (R2016)

AS/NZS 1170.2:2021

AS/NZS 1664.1:1997-Amdt 1:1999

General Principles

Imposed Loadings

Wind Loadings

Aluminium

Rail type: ELITE - Rail

Wind Terrain Category: 2, 2.5 & 3

Wind average recurrence: 200 years

This engineering document was designed to cater for most common installation scenarios defined with an importance level 2 (200 years wind average recurrence) such as residential shed or garage, small - isolated warehouses and farm sheds, residential carports, and one or double storey dwelling. If the project conditions do not fit on the above criteria, please contact Clenergy for an assessment.

From 1 May 2023 installers must follow AS/NZS1170.2:2021 only.

Designed: AE

Date: SEPTEMBER 2023

Disclaimer: From the date of publication onwards, any amendment made to any of the above-mentioned Standards will make this report outdated and a new one will have to be released, unless the amendment has no implications on this certificate

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 700 CLASSIC

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1500	1708	1442	1639	1364	1565
B1	1354	1561	1354	1561	1166	1483	1039	1426	912	1319
B2	1219	1506	1219	1506	1052	1431	937	1356	824	1188
C	907	1310	907	1310	784	1130	700	1007	616	884
D	643	923	643	923	556	798	497	712	438	627

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1471	1672	1410	1601	1335	1553	1205	1500
B1	1224	1508	1099	1453	972	1394	893	1291	807	1164
B2	1103	1455	992	1404	877	1268	806	1164	730	1050
C	822	1185	740	1065	656	942	603	866	546	783
D	583	837	526	753	466	667	429	614	389	556

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1679	1364	1565	1229	1510	1158	1479	1072	1441
B1	1113	1459	912	1319	824	1188	777	1119	720	1037
B2	1003	1409	824	1188	744	1071	702	1010	651	935
C	749	1078	616	884	557	799	526	753	488	698
D	532	762	438	627	396	567	374	535	348	496

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 700 HI-STRENGTH

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1483	1708	1317	1639	1153	1565
B1	1143	1561	1143	1561	985	1432	877	1272	770	1114
B2	1030	1500	1030	1500	888	1288	792	1145	696	1004
C	766	1107	766	1107	662	954	591	850	520	747
D	543	780	543	780	470	674	420	602	370	529

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1396	1672	1231	1601	1128	1553	1018	1481
B1	1034	1505	929	1349	822	1189	755	1091	682	984
B2	932	1354	838	1213	741	1071	682	983	616	887
C	694	1001	625	900	554	796	510	732	461	661
D	493	707	444	636	394	564	363	519	328	469

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	< 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1413	1679	1153	1565	1039	1510	978	1422	905	1314
B1	940	1365	770	1114	696	1004	656	946	608	876
B2	848	1228	696	1004	629	905	592	852	550	790
C	632	911	520	747	470	675	444	636	412	590
D	449	644	370	529	335	479	316	452	294	419

PV ez-Rack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1500	1708	1442	1639	1380	1565
B1	1376	1561	1376	1561	1309	1483	1260	1426	1151	1364
B2	1329	1506	1329	1506	1265	1431	1183	1377	1040	1317
C	1145	1399	1145	1399	990	1331	884	1271	777	1116
D	811	1165	811	1165	702	1007	628	899	553	791

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1471	1672	1410	1601	1370	1553	1324	1500
B1	1331	1508	1284	1453	1227	1394	1127	1355	1020	1308
B2	1285	1455	1240	1404	1108	1346	1018	1308	921	1264
C	1038	1353	934	1305	828	1190	762	1093	689	988
D	736	1056	663	951	589	842	542	775	491	701

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	< 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1679	1380	1565	1332	1510	1306	1479	1273	1441
B1	1289	1459	1151	1364	1040	1317	980	1291	909	1259
B2	1245	1409	1040	1317	939	1273	885	1248	821	1181
C	945	1310	777	1116	703	1008	663	951	616	882
D	671	962	553	791	501	715	473	675	439	626

PV ez-Rack SolarRoof Interface spacing table for **STRAMIT SPEED DECK ULTRA**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1500	1708	1442	1639	1380	1565
B1	1376	1561	1376	1561	1309	1483	1233	1426	1082	1364
B2	1329	1506	1329	1506	1248	1431	1112	1377	977	1317
C	1076	1399	1076	1399	930	1331	830	1194	731	1049
D	762	1095	762	1095	660	947	590	845	520	743

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1471	1672	1410	1601	1370	1553	1324	1500
B1	1331	1508	1284	1453	1153	1394	1060	1355	958	1308
B2	1285	1455	1177	1404	1042	1346	957	1308	865	1246
C	975	1353	878	1264	778	1118	716	1027	648	929
D	692	992	624	894	553	792	509	728	461	659

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1679	1380	1565	1332	1510	1306	1479	1271	1441
B1	1289	1459	1082	1364	977	1317	922	1291	854	1230
B2	1190	1409	977	1317	882	1271	832	1198	772	1110
C	888	1279	731	1049	661	947	624	894	579	829
D	631	904	520	743	470	672	444	634	412	589

PV ez-Rack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1093	1622	1093	1622	938	1382	833	1222	729	1065
B1	723	1056	723	1056	623	906	555	804	488	705
B2	652	948	652	948	562	815	501	725	440	635
C	485	700	485	700	419	604	374	538	329	472
D	343	493	343	493	297	426	266	380	234	335

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	986	1456	883	1298	779	1140	713	1042	643	937
B1	654	952	588	853	519	752	477	689	431	622
B2	589	856	530	768	468	678	431	622	390	562
C	439	633	395	569	350	503	322	463	292	418
D	311	447	281	402	249	356	229	328	208	297

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	894	1314	729	1065	657	956	618	900	573	831
B1	594	863	488	705	440	635	415	598	385	554
B2	536	777	440	635	397	572	374	540	348	500
C	400	576	329	472	297	427	281	402	260	373
D	284	407	234	335	212	303	200	286	186	265

PV ez-Rack SolarRoof Interface spacing table for **STRATCO TOPDECK 700**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1059	1571	1059	1571	908	1338	806	1183	706	1030
B1	700	1022	700	1022	603	876	537	779	471	682
B2	631	918	631	918	543	789	485	701	425	614
C	469	677	469	677	405	584	362	520	318	457
D	332	477	332	477	288	412	257	368	226	324

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	954	1409	854	1257	754	1102	690	1008	623	906
B1	633	922	568	826	503	728	462	667	418	602
B2	570	828	513	743	454	656	417	602	377	543
C	425	613	383	551	339	487	312	448	282	405
D	301	432	272	389	241	345	222	317	201	287

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	865	1272	706	1030	636	925	599	871	554	804
B1	575	835	471	682	425	614	401	579	372	536
B2	518	752	425	614	385	554	363	522	336	484
C	387	557	318	457	288	413	272	389	252	361
D	275	394	226	324	205	293	193	276	180	256

PV ez-Rack SolarRoof Interface spacing table for

LYSAGHT LONGLINE 305

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-29/AU and ER-I-34 (Refer to Note 4 for ER-I-34 reduction factors)
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1404	1708	1247	1639	1092	1565
B1	1083	1561	1083	1561	933	1356	831	1205	730	1055
B2	975	1420	975	1420	841	1220	750	1085	659	950
C	726	1048	726	1048	627	904	560	805	493	707
D	514	738	514	738	445	638	398	570	350	501

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1738	1322	1672	1165	1601	1068	1553	964	1403
B1	979	1426	879	1277	778	1126	714	1033	646	931
B2	882	1282	794	1149	702	1015	645	930	584	840
C	658	948	592	852	525	754	483	693	437	626
D	466	669	420	602	373	534	343	491	311	444

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1338	1679	1092	1565	983	1431	926	1346	857	1244
B1	890	1292	730	1055	659	950	621	896	576	829
B2	803	1164	659	950	595	857	562	807	520	748
C	599	862	493	707	445	639	420	602	390	559
D	425	609	350	501	317	453	299	428	278	397

PV ez-Rack SolarRoof Interface spacing table for

METROLL METLOK 700

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1500	1708	1442	1639	1380	1565
B1	1376	1561	1376	1561	1309	1483	1260	1426	1206	1364
B2	1329	1506	1329	1506	1265	1431	1217	1377	1165	1317
C	1237	1399	1237	1399	1147	1331	1024	1281	901	1227
D	940	1244	940	1244	814	1167	727	1042	641	916

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1471	1672	1410	1601	1370	1553	1324	1500
B1	1331	1508	1284	1453	1233	1394	1198	1355	1158	1308
B2	1285	1455	1240	1404	1190	1346	1158	1308	1067	1264
C	1197	1353	1082	1305	959	1253	882	1218	799	1145
D	853	1204	769	1101	682	976	628	898	569	813

Angle $0^\circ < \alpha \leq 10^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1679	1380	1565	1332	1510	1306	1479	1273	1441
B1	1289	1459	1206	1364	1165	1317	1136	1291	1053	1259
B2	1245	1409	1165	1317	1088	1273	1026	1248	951	1216
C	1095	1310	901	1227	815	1168	769	1101	713	1021
D	777	1114	641	916	580	829	548	782	508	726

PV ez-Rack SolarRoof Interface spacing table for

STRAMIT SPEED DECK 500

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1801	1476	1801	1265	1708	1123	1639	983	1436
B1	975	1425	975	1425	840	1222	749	1086	658	950
B2	878	1280	878	1280	757	1099	676	977	593	856
C	654	944	654	944	565	814	504	725	444	637
D	463	665	463	665	401	575	358	513	316	451

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1330	1738	1191	1672	1049	1536	962	1404	868	1263
B1	882	1284	792	1150	701	1015	643	930	582	839
B2	795	1155	715	1036	633	914	581	838	525	756
C	592	854	533	768	473	679	435	624	394	564
D	420	603	379	543	336	481	309	442	280	400

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1205	1679	983	1436	886	1290	834	1212	773	1120
B1	802	1164	658	950	593	856	560	806	518	747
B2	723	1047	593	856	536	772	506	728	468	674
C	539	777	444	637	401	575	379	543	351	503
D	383	549	316	451	286	408	270	385	250	357

PV ez-Rack SolarRoof Interface spacing table for

REV-KLIP 700

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1546	1801	1546	1801	1326	1708	1177	1639	1030	1504
B1	1022	1493	1022	1493	880	1281	784	1138	688	996
B2	921	1340	921	1340	794	1152	708	1024	622	898
C	685	989	685	989	592	853	528	760	465	668
D	485	697	485	697	420	602	375	538	331	473

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1393	1738	1248	1672	1100	1601	1008	1472	909	1324
B1	924	1346	830	1206	734	1063	674	974	610	879
B2	833	1210	749	1085	662	957	609	878	551	793
C	621	895	559	805	495	712	456	654	412	591
D	440	632	397	569	352	504	324	463	294	420

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1263	1679	1030	1504	928	1352	875	1271	809	1174
B1	840	1220	688	996	622	898	587	845	543	782
B2	757	1098	622	898	562	809	530	762	492	707
C	565	814	465	668	420	603	397	569	368	527
D	401	575	331	473	299	428	283	404	262	375

PV ez-Rack SolarRoof Interface spacing table for

METROLL METLOK 500

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1009	1498	1009	1498	865	1276	768	1127	672	982
B1	667	974	667	974	575	836	512	742	449	650
B2	601	876	601	876	518	752	462	668	406	586
C	447	646	447	646	386	557	345	496	303	436
D	317	455	317	455	274	393	245	351	216	309

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	910	1343	815	1198	718	1051	659	961	593	864
B1	603	878	542	787	479	694	441	636	397	574
B2	544	790	489	708	433	625	397	573	359	517
C	405	584	365	525	323	464	297	427	269	386
D	287	412	259	371	230	329	211	302	192	274

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	825	1212	672	982	606	882	570	829	528	767
B1	548	797	449	650	406	586	383	552	355	511
B2	494	717	406	586	367	528	346	497	321	461
C	369	531	303	436	274	394	259	371	240	344
D	262	375	216	309	195	279	184	263	171	244

PV ez-Rack SolarRoof Interface spacing table for

STEELINE STEEL-RIB 500 (ST28)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1327	1801	1327	1801	1138	1677	1010	1482	884	1291
B1	877	1281	877	1281	756	1099	673	976	591	854
B2	790	1151	790	1151	682	989	608	879	534	770
C	588	849	588	849	508	732	454	652	399	573
D	416	598	416	598	361	517	322	462	284	406

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1196	1738	1071	1575	944	1381	866	1263	780	1137
B1	793	1155	712	1035	630	912	579	837	523	755
B2	715	1039	643	931	568	822	522	754	472	681
C	533	768	480	691	425	611	391	561	354	507
D	378	542	341	488	302	432	278	398	252	360

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1084	1595	884	1291	797	1160	751	1091	695	1008
B1	721	1047	591	854	534	770	503	726	467	672
B2	651	943	534	770	482	694	455	655	421	606
C	485	699	399	573	361	518	341	488	316	453
D	344	494	284	406	257	367	242	346	225	322

PV ez-Rack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1579	1801	1579	1801	1500	1708	1442	1639	1380	1565
B1	1376	1561	1376	1561	1309	1483	1260	1426	1188	1364
B2	1329	1506	1329	1506	1265	1431	1217	1377	1073	1317
C	1182	1399	1182	1399	1022	1331	913	1281	803	1153
D	838	1203	838	1203	725	1040	648	928	571	817

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1525	1738	1471	1672	1410	1601	1370	1553	1324	1500
B1	1331	1508	1284	1453	1233	1394	1164	1355	1052	1308
B2	1285	1455	1240	1404	1144	1346	1051	1308	950	1264
C	1072	1353	965	1305	855	1229	787	1129	712	1021
D	760	1091	685	982	608	870	560	800	507	724

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1679	1380	1565	1332	1510	1306	1479	1273	1441
B1	1289	1459	1188	1364	1073	1317	1012	1291	939	1259
B2	1245	1409	1073	1317	970	1273	915	1248	849	1216
C	976	1310	803	1153	726	1041	685	982	636	911
D	693	993	571	817	517	739	488	697	453	647

PV ez-Rack SolarRoof Interface spacing table for

STEELINE LOKDECK 680

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	847	1257	847	1257	726	1070	645	946	564	825
B1	560	818	560	818	482	702	429	623	377	545
B2	504	734	504	734	435	631	388	561	341	492
C	375	542	375	542	324	467	289	416	255	366
D	266	382	266	382	230	330	205	294	181	259

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	763	1127	684	1005	603	882	552	806	498	725
B1	506	737	455	660	402	582	370	534	334	482
B2	456	662	410	594	363	524	333	481	301	434
C	340	490	306	441	271	390	249	358	226	324
D	241	346	217	311	193	276	177	254	161	230

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	692	1018	564	825	509	740	479	696	444	643
B1	460	668	377	545	341	492	321	463	298	428
B2	415	601	341	492	307	444	290	418	269	387
C	310	446	255	366	230	330	217	311	202	289
D	220	315	181	259	164	234	155	221	144	205

PV ez-Rack SolarRoof Interface spacing table for

STEELINE APEX STEEL APDECK 700

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 26 for other panel sizes)

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	3									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1476	1801	1476	1801	1265	1708	1123	1639	983	1436
B1	975	1425	975	1425	840	1222	749	1086	658	950
B2	878	1280	878	1280	757	1099	676	977	593	856
C	654	944	654	944	565	814	504	725	444	637
D	463	665	463	665	401	575	358	513	316	451

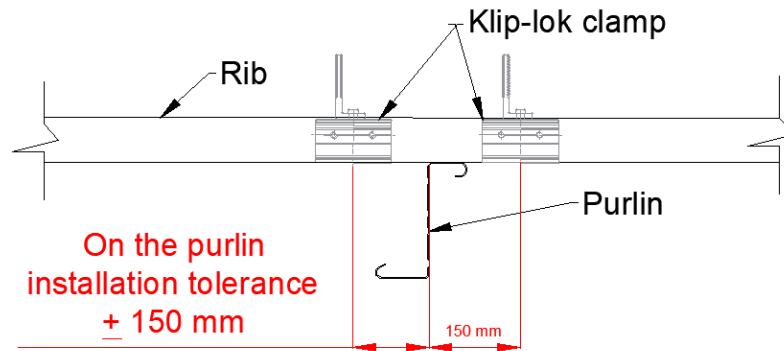
Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2.5									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1330	1738	1191	1672	1049	1536	962	1404	868	1263
B1	882	1284	792	1150	701	1015	643	930	582	839
B2	795	1155	715	1036	633	914	581	838	525	756
C	592	854	533	768	473	679	435	624	394	564
D	420	603	379	543	336	481	309	442	280	400

Angle $0^\circ < \alpha \leq 30^\circ$										
TC	2									
Building Height (m)	≤ 5		$5 < H \leq 10$		$10 < H \leq 15$		$15 < H \leq 20$		$20 < H \leq 30$	
	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central	UW&DW	Central
A	1205	1679	983	1436	886	1290	834	1212	773	1120
B1	802	1164	658	950	593	856	560	806	518	747
B2	723	1047	593	856	536	772	506	728	468	674
C	539	777	444	637	401	575	379	543	351	503
D	383	549	316	451	286	408	270	385	250	357

General Notes

Note 1. This engineering document was designed to cater for most common PV installation scenarios however, it does not cater for all of them. Contact Clenergy if you are unable to comply with any of the installation specifications listed on this document.

Note 2. Installation to be done only on top of the purlins with a maximum tolerance of 150 mm.

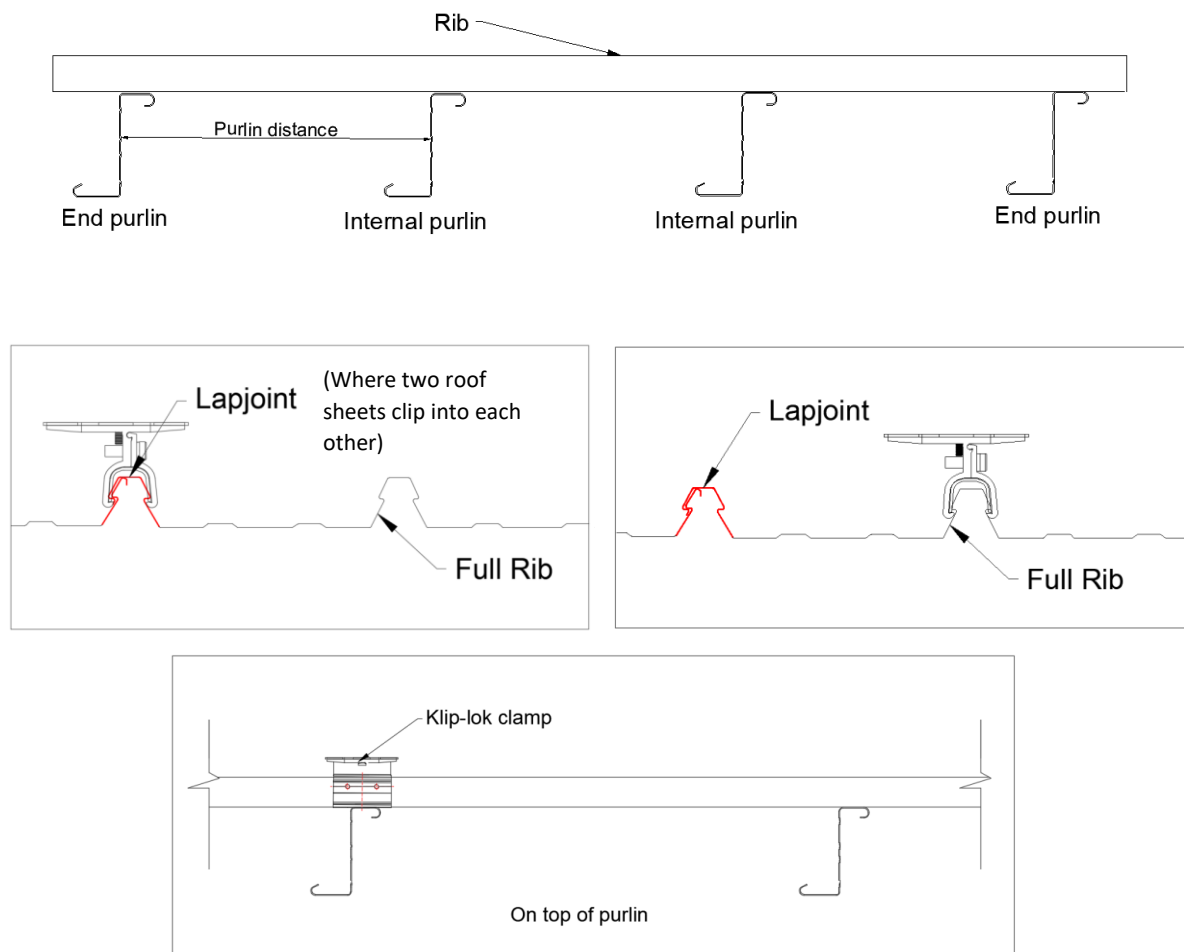


Note 3. Exclusion for installation of klip-lok clamps depending on the roof sheet type to be as per the following table.

Roof Sheet type	Exclusions	Test Report No.
Lysaght KLIP-LOK 700 Classic	N/A	MT-19/0633-A
Lysaght KLIP-LOK 700 Hi-Strength	N/A	MT-11/023
Lysaght KLIP-LOK 406	N/A	MT-17/001-A
Stramit Speed Deck Ultra	N/A	MT-11/023
Fielders Kingklip 700	N/A	MT-11/280
Stratco Topdeck 700	N/A	MT-17/001-B and MT-19/1007
Lysaght Longline 305	N/A	MT-13/133
Metroll Metlok 700	· Exclude lapjoints	MT-19/0633-B
Stramit Speed Deck 500	N/A	MT-19/0762
Rev-klip 700	N/A	MT-19/1018-A
Metroll Metlok 500	· Exclude lapjoints	7530/MJ
Steelline Steel-Rib 500	N/A	MT-19/1090-B
Revolution Maxline 340	N/A	MT-19/1018-B
Steelline Lokdeck 680	N/A	20-0028

Contact Clenergy for a project specific assessment if you cannot comply the above exclusions.

Refer to the below pictures to find clamp position, rib type and location on respective roof sheet.



Note 4. Lysaght Longline 305 fixing spacings were calculated based on the capacity of Clenergy's ER-I-29/AU clamp and the roof sheet. When using Clenergy's ER-I-34 clamp, Longline 305 fixing spacings shall be reduced as follows:

Wind Region A	Wind Region B1	Wind Region B2& C
-80%	-80%	-70%

Note 5. Exclusion for installation of Clenergy's ER-I-34 on Lysaght Longline 305 roof sheet to be as per the below table

Roof Sheet type	Exclusions	Test Report No.
Lysaght Longline 305	• Exclude lapjoints	MT- 20-0661

Note 6. Rails cannot run parallel to the ribs unless the applicable table spacings are equal or larger the purlin distance. Contact Clenergy if you are unable to comply with this condition or any of the installation specifications listed on this document.

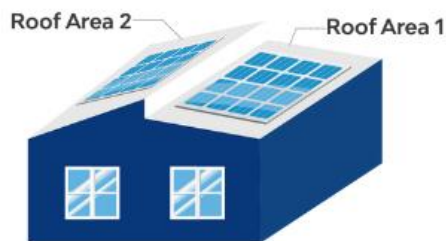
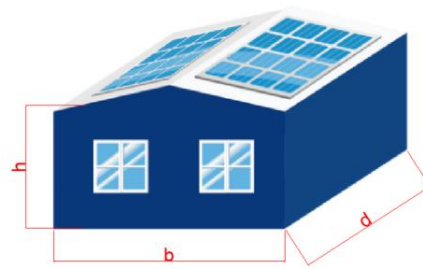
Note 7. The spacing information in this document has been designed to be compliant with the capacity of the below items per roof area:

- Klip-lok clamp

- Roofing sheet
- Fixing clip between roofing sheet to purlin

Prior to carrying the PV installation, it is recommended to check that the roof sheet has been installed according to the manufacturers specifications and there are no missing clips.

Roof area is defined as a single surface that has no height variance.



Note 8. This document does not cover the following:

- Building frame capacity
- Off the purlin installation

Note 9. This certificate only covers the assessment of the Clenergy PV mounting system, including the components listed on note 10. Assessment of the roof structure, PV panels and other fixings are to be checked by the installer/contractor.

Note 10. The components mentioned on Appendix I are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2021.

Note 11. For Terrain Category (TC) definition, please refer to clause 4.2.1 of AS/NZS 1170.2:2021.

Note 12. Wind Direction Multiplier (M_d) taken as 1.0. Refer to clause 3.3 of AS/NZS 1170.2:2021 for more information.

Note 13. Shielding Multiplier (M_s) taken as 1.0. Refer to clause 4.3 of AS/NZS 1170.2:2021 for more information.

Note 14. Topographic Multiplier (Mt) taken as 1.0. Refer to clause 4.4 of AS/NZS 1170.2:2021 for more information. For topographic Multiplier (Mt) more than 1.0 (installations on a mountain, hilly or sloped terrain). The below table provides a reduction factor applied for topographic multipliers greater than 1 (installation on a slope, hill on mountain). To achieve a more accurate and cost-effective design, please contact Clenergy Engineering department.

Mt	A, B1, B2	
	U.W & D. W	Central
1	1	1
1.01	1.00	1.00
1.02	1.00	1.00
1.03	0.92	0.94
1.04	0.92	0.94
1.06	0.92	0.88
1.08	0.85	0.88
1.09	0.85	0.81
1.1	0.85	0.81
1.2	0.69	0.69
1.3	0.54	0.56
1.4	0.46	0.50
1.5	0.38	0.44

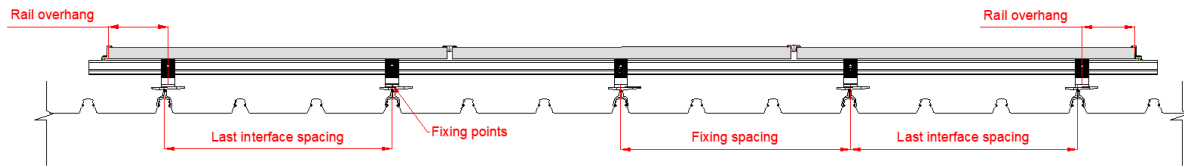
For installations located in Wind region C and D please contact Clenergy Engineering department.

Note 15. This certificate cannot be used if the site is located on a hill, ridge or escarpment. Contact Clenergy if the aforementioned condition is met on site.

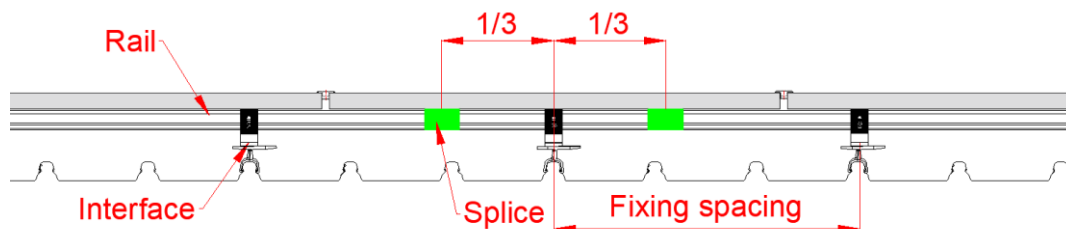
Note 16. Clamping zone of the PV panels shall be according to the manufacturer's specifications.

Note 17. Capacities checked and compared against testing data from Clenergy Australia and MTS (NATA certified).

Note 18. Rail overhang ends where the panel finishes and this should be less than 40% of the last installed interface spacing.



Note 19. ER-R-Elite rail splice can only be installed within $\frac{1}{3}$ (maximum) of the fixing spacing (centre to centre) from the nearest interface when fixing spacing is over 1700 mm.



Note 20. ER-R-Elite rail splice cannot be installed on overhangs.

Note 21. From the date of publication onwards, any amendment made to any of the above-mentioned Standards will make this report outdated and a new one will have to be released, unless the amendment has no implications on this certificate.

Note 22. All components from Clenergy must be installed according to manufacturer's specification and the instructions shown in the relevant installation manual. Please check the Clenergy Australia website or contact them for access to the most recent installation manuals.

Note 23. Only hip and gable roofs installations are covered on this certificate. Contact Clenergy if you are planning to install on a different roof type such as curved, multi-span (pitched and saw-tooth), mansard, circular bins, silos, tanks, pitched free roofs, troughed free roofs, hypar free roofs, canopies, awnings and cantilevered roofs.

Note 24. No consideration has been taken on the effect of snow loads. In case the roof is located in a snow prone area, a project specific design must be completed.

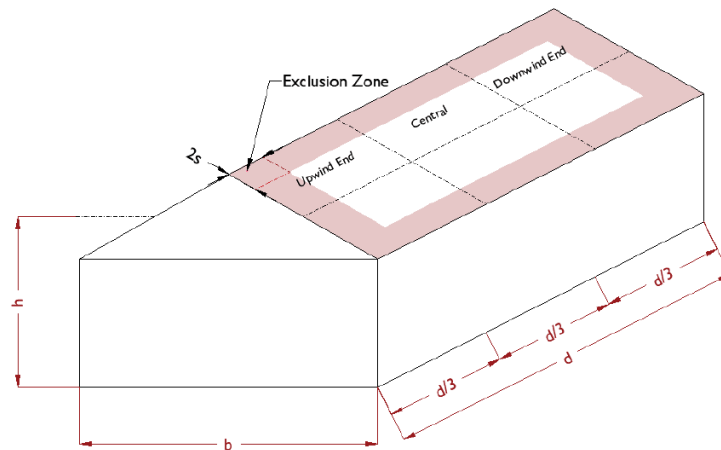
Note 25. Panel width cannot exceed 1.20 m for any of the above panel length dimensions and panel weight cannot exceed 15 kg/m^2 .

Note 26. This Engineering report is based on 2.1 m x 1 m panels and two rails per panel. However, for different panel sizes a percentage increase or decrease can be applied on all interface spacings as shown on the following table.

Number of rails per panel	Panel length (mm)	Spacing +/- W.R – A & B1	Spacing +/- W.R –B2 C & D
2 rails	≤ 1700	10%	12%
3 rails	≤ 1700	12%	18%
4 rails	≤ 1700	15%	20%
2 rails	≤ 1800	4%	7%
3 rails	≤ 1800	12%	18%
4 rails	≤ 1800	15%	20%
2 rails	≤ 1900	4%	7%
3 rails	≤ 1900	10%	15%
4 rails	≤ 1900	12%	18%
2 rails	≤ 2100	0%	0%
3 rails	≤ 2100	10%	15%
4 rails	≤ 2100	12%	18%
2 rails	≤ 2200	-10%	-12%
3 rails	≤ 2200	7%	12%
4 rails	≤ 2200	12%	18%
2 rails	≤ 2300	-16%	-12%
3 rails	≤ 2300	5%	12%
4 rails	≤ 2300	10%	15%
2 rails	≤ 2400	-19%	-15%
3 rails	≤ 2400	5%	10%
4 rails	≤ 2400	8%	12%

Note 27. Conditions for flush mounted systems installed on flat and pitched roofs according to the D6 Appendix of the AS/NZS 1170.2:2021.

- Roof pitch to be between 1° and 30°.
- $h/d \leq 0.5$ and $h/b \leq 0.5$. Being h = height, b = width and d = length of the building as per the below picture.
- Gap between the underside of the panel and the roof to be no less than 50 mm and no more than 300 mm.
- Minimum distance from the edge of the roof to be "2s" where "s" is the gap between the underside of the panel and the roof.



Note 28. Refer to the latest commercial certificates when building parameters fall outside section B6 of the AS/NZS 1170.2:2021 standard.

Note 29. The more conservative outcome must be used if one panel or panel row fall between two roof zones.

Example

- Project Address: 7 May, Angel Falls, VIC.
- Building height: 5m
- Building dimensions: 30 x 90 m
- Roof pitch: less than 3°
- Roof Sheet: Lysaght Klip-lok 700 Classic
- Panel rail type: ER-R-Elite
- Panel rail orientation: perpendicular to purlins
- Purlin spacing: 1200 mm
- Panel dimension: 2.1 m x 1 m

Step 1: Define wind region, terrain category and topographic multiplier based on the project address. Please refer to AS/NZS 1170.2:2021 to define Wind regions, terrain category and topographic multiplier. If the site has a topographic multiplier > 1 refer to note 14.

- For this example:
- Wind region: A
- Terrain category: 3
- Topographic multiplier: 1

Step 2: Check if the Flush system meets the conditions on the B6 Appendix of the AS/NZS 1170.2:2021. Where the following conditions need to be met:

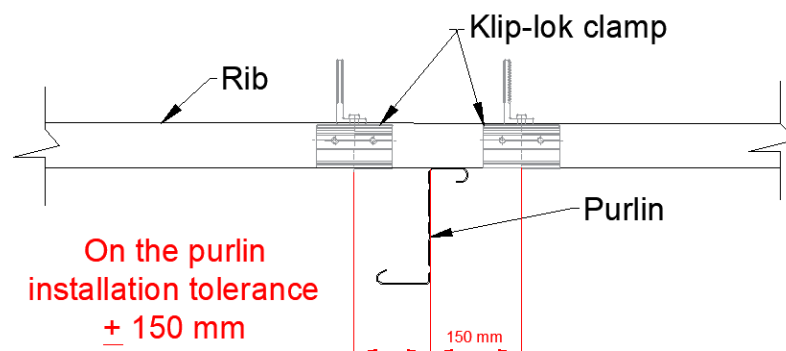
- Roof pitch to be between 1° and 30° .
- $h/d < 0.5$ and $h/b < 0.5$. Being h = height, b = width and d = length of the building as per the below picture.
 $5/30 = 0.16 < 0.5$ and $5/90 = 0.05 < 0.5$.
- Gap between the underside of the panel and the roof to be no less than 50mm and no more than 300mm.

Step 3: According to the spacing tables shown on this document:

- o Upwind & Downwind: 1579 mm
- o Central: 1801 mm

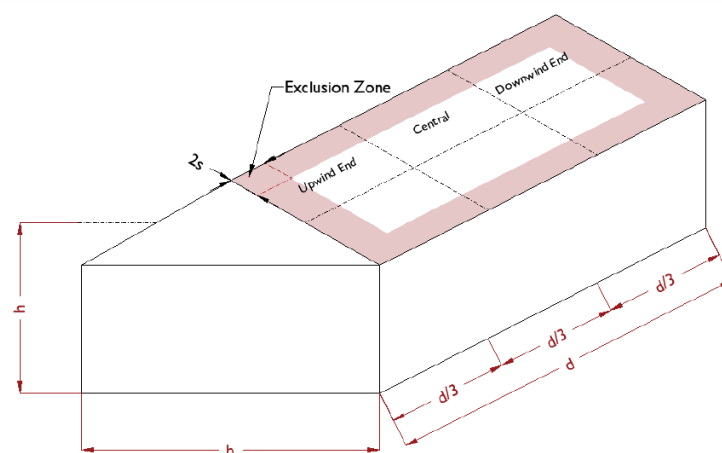
Installation only feasible on top of the purlins, therefore:

- o Upwind & Downwind: 1200 mm (with a maximum tolerance of 150 mm)
- o Central: 1200 mm (with a maximum tolerance of 150 mm).



Step 4: Define roof zone definition as per image below.

$d = 90 \text{ m}$
 $b = 30 \text{ m}$
 $d/3 = 90/3 = 30 \text{ m}$



Exclusion zone for flush installation to be the minimum distance from the edge of the roof " $2 \times s$ ", where " s " is the gap between the underside of the panel and the roof. Refer to the exclusion zone (red area) on the above image.

Appendix I – Component list

The following components are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2021.

Components	Part No.	Description
Elite Rail	ER-R-ELT/XXXX	Elite Rail
Splice	ER-SP-ECO	Splice
Elite Rail Black	ER-R-ELT/XXXX/BA	Elite-Rail Black
Splice	ER-SP-ECO/BA	Splice, Black
Non-penetrative interface	ER-I-09	Klip-lok bracket
Non-penetrative interface	ER-I-09/100/45	Klip-lok bracket
Non-penetrative interface	ER-I-29/AU	Klip-lok bracket
Non-penetrative interface	ER-I-32/AU	Klip-lok bracket
Non-penetrative interface	ER-I-34	Brooklyn Klip-lok clamp
Non-penetrative interface	ER-I-34/CRC	Brooklyn Klip-lok clamp pre-assembly with cross connector clamp
Non-penetrative interface	ER-I-34/05A/EZC	Brooklyn Klip-lok clamp pre-assembly with Tin Interface with ezClick connection
Non-penetrative interface	ER-I-09/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-29/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-32/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-34/BA	Black Brooklyn Klip-lok clamp
Non-penetrative interface	ER-I-34/CRC/BA	Black Brooklyn Klip-lok clamp pre-assembly with cross connector clamp
Non-penetrative interface	ER-I-34/05A/EZC/BA	Black Brooklyn Klip-lok clamp pre-assembly with Tin Interface with ezClick connection
Inter Clamp	ER-IC-STXX	Inter Clamp = clamp + Z-Module + bolt
End Clamp	ER-EC-STXX	End Clamp = clamp + Z-Module + bolt
Inter Clamp	ER-IC-STXX/G	Inter Clamp with Grounding Pins
Security Inter Clamp	ER-IC-STXX/S	Security Inter Clamp
Security End Clamp	ER-EC-STXX/S	Security End Clamp
Clamp	C-U/30/46-G	Akashi Clamp for Frame Height 30-46mm with Grounding Clip
Clamp	C-U/30/46	Akashi Clamp for Frame Height 30-46mm
Inter Clamp	ER-IC-STXXB	Inter Clamp XX Black
End Clamp	ER-EC-STXXB	End Clamp XX Black
Inter Clamp	ER-IC-STXXB/G	Black Inter Clamp with Grounding Pins
Clamp	C-U/30/46-G/BA	Black Akashi Clamp with grounding clip

Clamp	C-U/30/46/BA	Black Akashi Clamp
End Clamp	ER-EC-DU35/40	End Clamp dual 35 or 40mm
End Clamp	ER-EC-DU40/46	End Clamp dual 40 or 46mm
Cross Connector Clamp	CRC-R/ECO	Cross Connector Clamp
Cross Connector Clamp	CRC-R/ECO-ZBW	Cross Connector Clamp with Z-Module
Cross Connection Clamp and Plate Kit	K-CRC/PT	Cross Connector Clamp and plate
Flush Mount Interface	ER-I-05	Tin Interface
Flush Mount Interface	ER-I-05/BA	Tin Interface Black
Flush Mount Interface	ER-I-05/CM	Tin Interface with click module
Flush Mount Interface	ER-I-05A/EZC/ECO	Tin Interface with ezClick connection
Flush Mount Interface	ER-I-05/C5	Tin Interface with C5 rated Screw
End Clamp (*)	EC-FL/GE/XX/XX	End Clamp for Frameless Module (glued EPDM)
Inter Clamp (*)	IC-FL/GE/XX/XX	Inter Clamp for Frameless Module (glued EPDM)
End Clamp (*)	ER-EC-FL/XX/XX	End Clamp for Frameless Module
Inter Clamp (*)	ER-IC-FL/XX/XX	Inter Clamp for Frameless Module
Black End Clamp (*)	EC-FL/GE/XX/XX/B	Black End Clamp for Frameless Module (glued EPDM)
Black Inter Clamp (*)	IC-FL/GE/XX/XX/B	Black Inter Clamp for Frameless Module (glued EPDM)

(*) Subject to the panel manufacturer's installation guide.

Non-Penetrative Flush and Tilt Mount Certification Letter



CIVIL & STRUCTURAL ENGINEERS
RESIDENTIAL - INDUSTRIAL - COMMERCIAL - PRODUCT DEVELOPMENT

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13 September 2023

Clenergy Australia
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Clayton, VIC 3168

CERTIFICATION LETTER

Clenergy PV-ezRack SolarRoof Klip-lok Flush and Tilt interface certification (Elite Rail) - TC 2, 2.5, 3 - Wind Region A, B1, B2, C & D Internal REF: **00606-ELT-2**. Project REF: **CL-1173-Y.REV.1**.

MW Engineering Melbourne, being Structural Engineers within the meaning of Australian regulations, have calculated the maximum spacings for the PV ez-Rack rail system for the following conditions:

- **Wind Loads to AS 1170.2-2021**
 - o Wind Terrain Category 2, 2.5 and 3
 - o Wind average recurrence of 200 years
 - o Wind Region A, B1, B2, C and D
- Solar panel length up to 2.4 m
- Solar panel width up to 1.2 m

Attached are the tables showing the spacings according to Wind Region, roof pitch, and building height.

The values shown on these tables will be valid unless an amendment is issued on any of the following codes:

- | | |
|-----------------------------------|--------------------|
| - AS/NZS 1170.0- 2002 AMDT 4-2016 | General Principles |
| - AS/NZS 1170.1- 2002 AMDT 4-2016 | Imposed Loadings |
| - AS/NZS 1170.2- 2021 | Wind Loadings |
| - AS/NZS 1664.1- 1997 AMDT 1:1999 | Aluminium Code |

Should you have any queries, do not hesitate to contact us.

Best Regards,

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September 2023

STRUCTURAL DESIGN CERTIFICATION



Klip-lok Flush and Tilt Interface spacing tables (Elite Rail)

Standard: AS/NZS 1170.2:2021

Terrain Category: 2, 2.5 & 3

Client: Clenergy Australia

REF: 00606-ELT-2

Date: SEPTEMBER 2023

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Client: Clenergy Australia

Internal reference: CL-1173-Y.REV.1

Project: PV-ezRack SolarRoof Klip-lok flush and tilt interface spacing tables

Australian Standards

AS/NZS 1170.0:2002 (R2016)

AS/NZS 1170.1:2002 (R2016)

AS/NZS 1170.2:2011 (R2016)

AS/NZS 1664.1:1997-Amdt 1:1999

General Principles

Imposed loadings

Wind Loadings

Aluminium

Rail type: ELITE-RAIL

Wind Terrain Category: 2, 2.5 & 3

Wind average recurrence: 200 years

This engineering document was designed to cater for most common installation scenarios defined with an importance level 2 (200 years wind average recurrence) such as residential shed or garage, small - isolated warehouses and farm sheds, residential carports, and one or double storey dwelling. If the project conditions do not fit on the above criteria, please contact Clenergy for an assessment.

From 1 May 2023 installers must follow AS/NZS1170.2:2021 only.

Designed: AE

Date: SEPTEMBER 2023

Disclaimer: From the date of publication onwards, any amendment made to any of the above-mentioned Standards will make this report outdated and a new one will have to be released, unless the amendment has no implications on this certificate.

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1170	1532	1374	1293	1060	1483	1327	1247	947
B2	1591	1433	1350	1215	1591	1433	1350	1215	1536	1379	1297	1071	1494	1338	1257	970	1446	1291	1212	866
C	916	820	770	568	916	820	770	568	883	787	724	500	857	763	656	451	827	735	586	401
D	837	744	608	417	837	744	608	417	804	696	535	366	779	630	483	330	751	563	430	293

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1278
B1	1592	1434	1350	1219	1553	1395	1313	1114	1507	1350	1270	1002	1475	1320	1240	930	1438	1284	1206	850
B2	1554	1396	1314	1117	1514	1358	1277	1019	1469	1314	1234	915	1438	1284	1205	850	1400	1248	1127	777
C	894	798	749	521	869	775	689	474	842	749	620	425	823	731	575	394	800	685	526	359
D	815	724	558	382	792	662	508	347	765	595	456	310	747	552	422	287	726	505	386	262

Angle	0° < α ≤ 10°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1644	1554	1427	1734	1566	1476	1352	1693	1525	1437	1300	1670	1502	1414	1236	1640	1472	1386	1157
B1	1557	1399	1317	1125	1483	1327	1247	947	1446	1291	1212	866	1423	1270	1190	822	1395	1244	1114	767
B2	1519	1362	1281	1029	1446	1291	1212	866	1407	1255	1146	790	1386	1234	1090	750	1358	1209	1020	701
C	872	777	696	479	827	735	586	401	805	697	535	366	792	662	508	347	775	620	475	324
D	794	669	513	351	751	563	430	293	730	514	393	267	708	488	372	252	663	456	347	235

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC (Cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1435	1348	987	1601	1435	1348	987	1543	1379	1285	851	1498	1336	1165	759	1448	1280	1022	667	
B1	1360	1202	954	623	1360	1202	954	623	1307	1117	823	539	1266	994	734	482	1216	872	645	424	
B2	1323	1160	860	562	1323	1160	860	562	1271	1006	742	487	1228	896	662	435	1174	786	582	383	
C	748	520	385	253	748	520	385	253	690	449	333	220	614	401	298	196	539	352	262	173	
D	562	368	273	180	562	368	273	180	485	318	237	157	433	284	212	140	381	250	187	124	

Angle		10° < α ≤ 15°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1397	1305	893	1520	1357	1235	803	1472	1309	1090	711	1440	1271	1000	654	1401	1227	903	591	
B1	1324	1162	863	565	1286	1053	776	509	1243	930	687	451	1207	854	631	415	1166	771	571	376	
B2	1288	1057	779	510	1250	949	701	460	1200	838	620	408	1166	770	570	375	1068	696	516	340	
C	723	471	349	230	650	424	315	207	574	375	279	184	527	345	257	170	476	312	232	154	
D	509	334	248	164	458	301	224	148	405	267	199	131	373	245	183	121	337	222	166	110	

Angle		10° < α ≤ 15°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1250	813	1448	1280	1022	667	1408	1236	921	603	1386	1178	868	569	1357	1090	804	527	
B1	1290	1065	786	514	1216	872	645	424	1174	786	582	383	1139	742	550	362	1054	687	510	336	
B2	1254	960	709	466	1174	786	582	383	1090	710	526	346	1026	670	497	327	950	621	461	304	
C	658	429	318	210	539	352	262	173	486	319	237	157	458	301	224	148	424	279	208	137	
D	463	304	226	150	381	250	187	124	344	227	169	112	324	214	160	106	301	199	148	98	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC (Cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1297	1062	693	1482	1297	1062	693	1425	1233	915	599	1374	1107	816	535	1312	970	717	471	
B1	1232	906	670	440	1232	906	670	440	1171	782	578	381	1070	697	517	341	938	613	455	300	
B2	1190	817	605	398	1190	817	605	398	1083	706	523	345	964	630	467	308	846	554	411	272	
C	560	366	272	180	560	366	272	180	483	317	236	156	431	283	211	139	379	249	186	123	
D	395	260	194	128	395	260	194	128	342	225	168	111	305	201	150	100	269	178	133	88	

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1254	961	628	1401	1172	864	565	1342	1034	764	502	1303	949	702	462	1259	858	635	417	
B1	1191	820	606	399	1134	738	546	360	1001	653	484	319	918	600	446	294	829	542	403	266	
B2	1138	740	548	361	1021	666	494	326	902	590	438	289	828	542	403	266	748	490	365	242	
C	507	332	247	163	456	299	223	147	403	265	198	131	371	244	182	121	336	221	165	109	
D	358	236	176	117	323	213	159	105	286	189	141	94	263	174	130	86	238	158	118	78	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1407	1186	874	572	1312	970	717	471	1267	875	648	426	1242	825	610	402	1174	764	566	373	
B1	1147	746	553	364	938	613	455	300	846	554	411	272	797	522	388	257	738	484	360	238	
B2	1033	674	500	330	846	554	411	272	763	500	372	246	719	472	351	232	666	438	326	216	
C	461	302	225	149	379	249	186	123	342	225	168	111	323	213	159	105	299	198	147	98	
D	326	215	161	106	269	178	133	88	243	161	120	80	230	152	113	75	213	141	105	70	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC (Cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1103	813	534	1372	1103	813	534	1304	951	703	462	1254	847	627	413	1143	745	552	364	
B1	1067	695	515	340	1067	695	515	340	920	601	446	294	819	537	399	263	719	472	351	232	
B2	962	628	466	307	962	628	466	307	830	543	404	266	739	485	361	238	650	427	318	210	
C	430	282	210	139	430	282	210	139	372	245	182	121	332	219	163	108	292	193	144	95	
D	305	201	150	99	305	201	150	99	264	174	130	86	236	156	116	77	208	138	103	68	

Angle		20° < α ≤ 25°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	998	737	485	1278	898	664	436	1220	794	588	387	1119	729	541	356	1009	660	490	323	
B1	966	630	468	309	867	567	422	278	767	503	374	247	705	462	344	228	637	418	312	206	
B2	870	570	423	279	782	513	382	252	693	454	338	224	637	418	311	206	575	379	282	187	
C	389	256	191	126	351	231	172	114	311	205	153	101	286	189	141	93	259	171	128	85	
D	276	183	136	90	249	165	123	82	221	146	109	73	204	135	101	67	184	122	91	61	

Angle		20° < α ≤ 25°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1284	908	672	441	1143	745	552	364	1030	672	499	329	970	634	471	311	898	588	437	289
B1	878	574	426	282	719	472	351	232	650	427	318	210	613	403	300	198	568	374	278	185
B2	792	518	386	255	650	427	318	210	587	386	288	190	554	365	272	180	514	338	252	167
C	355	234	174	115	292	193	144	95	264	174	130	86	249	165	123	82	231	153	114	76
D	252	167	124	83	208	138	103	68	188	125	93	62	178	118	88	58	165	109	82	54

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC (Cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	1103	813	534	1372	1103	813	534	1304	951	703	462	1254	847	627	413	1143	745	552	364
B1	1067	695	515	340	1067	695	515	340	920	601	446	294	819	537	399	263	719	472	351	232
B2	962	628	466	307	962	628	466	307	830	543	404	266	739	485	361	238	650	427	318	210
C	430	282	210	139	430	282	210	139	372	245	182	121	332	219	163	108	292	193	144	95
D	305	201	150	99	305	201	150	99	264	174	130	86	236	156	116	77	208	138	103	68

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	998	737	485	1278	898	664	436	1220	794	588	387	1119	729	541	356	1009	660	490	323	
B1	966	630	468	309	867	567	422	278	767	503	374	247	705	462	344	228	637	418	312	206	
B2	870	570	423	279	782	513	382	252	693	454	338	224	637	418	311	206	575	379	282	187	
C	389	256	191	126	351	231	172	114	311	205	153	101	286	189	141	93	259	171	128	85	
D	276	183	136	90	249	165	123	82	221	146	109	73	204	135	101	67	184	122	91	61	

Angle	25° < α < 30°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1284	908	672	441	1143	745	552	364	1030	672	499	329	970	634	471	311	898	588	437	289
B1	878	574	426	282	719	472	351	232	650	427	318	210	613	403	300	198	568	374	278	185
B2	792	518	386	255	650	427	318	210	587	386	288	190	554	365	272	180	514	338	252	167
C	355	234	174	115	292	193	144	95	264	174	130	86	249	165	123	82	231	153	114	76
D	252	167	124	83	208	138	103	68	188	125	93	62	178	118	88	58	165	109	82	54

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 CLASSIC (Cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$\alpha = 30^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1276	892	660	434	1276	892	660	434	1183	770	570	376	1053	687	510	337	923	604	449	297
B1	862	564	419	277	862	564	419	277	744	488	363	240	664	436	325	215	584	384	286	190
B2	778	510	379	250	778	510	379	250	672	442	329	218	600	394	294	194	527	347	259	172
C	349	230	171	113	349	230	171	113	302	199	149	99	270	178	133	88	238	157	117	78
D	248	164	122	81	248	164	122	81	215	142	106	71	192	127	95	63	169	112	84	56

Angle		$\alpha = 30^\circ$																			
TC	2.5																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1233	808	598	394	1115	727	539	355	985	643	478	315	904	592	439	291	817	536	398	264	
B1	781	512	381	251	702	461	343	227	622	409	305	202	572	376	281	186	518	341	254	168	
B2	705	462	344	228	634	417	310	206	562	370	276	182	517	341	254	168	468	309	230	153	
C	316	209	156	103	285	188	140	93	253	167	125	83	233	154	115	76	211	140	104	69	
D	225	149	111	74	203	134	100	67	180	119	89	59	166	110	82	55	150	100	75	50	

Angle	$\alpha = 30^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1128	735	545	360	923	604	449	297	833	546	406	269	785	515	383	253	728	478	355	235
B1	710	466	347	230	584	384	286	190	527	347	259	172	498	328	245	162	462	305	227	150
B2	642	422	314	208	527	347	259	172	477	314	234	155	450	297	222	147	418	276	206	137
C	288	190	142	94	238	157	117	78	215	142	106	71	203	134	100	67	188	125	93	62
D	205	136	102	67	169	112	84	56	153	102	76	51	145	96	72	48	135	89	67	44

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 700 HI-STRENGTH

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle $0^\circ < \alpha \leq 10^\circ$																				
TC	3																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1335	1734	1566	1476	1198
B1	1630	1470	1386	1120	1630	1470	1386	1120	1574	1416	1334	989	1532	1374	1285	896	1483	1327	1153	800
B2	1591	1433	1350	1026	1591	1433	1350	1026	1536	1379	1297	906	1494	1338	1180	819	1446	1291	1058	731
C	916	820	693	480	916	820	693	480	883	787	612	422	857	717	554	381	827	643	495	339
D	837	667	514	353	837	667	514	353	804	588	452	309	765	533	408	278	686	475	364	247

Angle $0^\circ < \alpha \leq 10^\circ$																				
TC	2.5																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1399	1760	1590	1501	1264	1726	1557	1468	1176	1686	1517	1429	1080
B1	1592	1434	1350	1030	1553	1395	1313	941	1507	1350	1216	846	1475	1320	1133	786	1438	1284	1039	718
B2	1554	1396	1314	943	1514	1358	1237	861	1469	1314	1116	774	1438	1284	1038	718	1400	1230	952	656
C	894	798	637	440	869	752	582	401	842	679	523	359	823	631	486	333	800	579	444	304
D	815	613	471	323	792	559	429	293	724	503	385	262	674	467	357	243	619	427	326	221

Angle $0^\circ < \alpha \leq 10^\circ$																				
TC	2																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1644	1554	1413	1734	1566	1476	1198	1693	1525	1437	1098	1670	1502	1414	1044	1640	1472	1386	978
B1	1557	1399	1317	950	1483	1327	1153	800	1446	1291	1058	731	1423	1270	1006	694	1395	1216	942	648
B2	1519	1362	1249	870	1446	1291	1058	731	1407	1250	969	668	1386	1190	921	634	1358	1116	862	592
C	872	759	588	405	827	643	495	339	805	589	452	309	792	559	429	293	753	523	401	273
D	794	565	434	296	686	475	364	247	629	434	332	225	598	412	314	213	560	385	293	199

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1435	1289	833	1601	1435	1289	833	1543	1379	1108	719	1498	1335	984	641	1448	1175	863	564	
B1	1360	1097	806	526	1360	1097	806	526	1307	944	695	455	1266	840	620	406	1137	736	545	358	
B2	1323	987	726	475	1323	987	726	475	1271	850	627	411	1170	757	559	368	1022	664	492	324	
C	677	439	325	214	677	439	325	214	583	380	281	185	519	339	251	166	455	298	221	146	
D	475	311	231	152	475	311	231	152	410	269	200	132	366	240	179	118	321	212	158	104	

Angle		10° < α ≤ 15°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1397	1164	754	1520	1357	1043	678	1472	1255	921	600	1440	1150	845	552	1401	1036	762	499	
B1	1324	991	730	477	1286	890	656	430	1215	786	580	381	1113	721	534	350	1002	651	482	318	
B2	1288	893	658	431	1237	802	592	389	1093	708	524	345	1001	650	482	317	902	588	436	287	
C	612	398	295	194	549	358	266	175	485	317	236	156	445	292	217	143	402	264	196	130	
D	430	282	210	139	387	254	189	125	343	225	168	111	315	207	154	102	285	188	140	93	

Angle		10° < α ≤ 15°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1056	686	1448	1175	863	564	1408	1057	778	509	1386	995	734	480	1357	921	679	445	
B1	1290	900	663	434	1137	736	545	358	1022	664	492	324	962	626	464	306	890	580	430	284	
B2	1249	811	598	393	1022	664	492	324	921	600	445	293	867	566	419	277	802	524	389	257	
C	556	362	269	177	455	298	221	146	411	269	200	132	387	254	189	125	359	236	175	116	
D	391	257	191	126	321	212	158	104	291	191	143	95	274	181	135	89	254	168	125	83	

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1222	897	585	1482	1222	897	585	1425	1051	774	506	1374	934	689	452	1267	819	605	398	
B1	1182	765	566	371	1182	765	566	371	1016	660	489	322	904	589	437	288	792	518	384	254	
B2	1063	690	510	336	1063	690	510	336	915	596	442	291	814	532	394	260	714	467	347	230	
C	473	309	230	152	473	309	230	152	408	268	199	132	364	239	178	118	320	210	157	104	
D	334	220	164	108	334	220	164	108	289	190	142	94	258	170	127	84	227	150	112	74	

Angle		15° < α ≤ 20°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1103	812	530	1401	990	729	478	1342	874	645	423	1239	802	593	389	1116	724	536	353	
B1	1067	693	513	337	958	623	462	304	845	551	409	270	775	507	376	248	700	458	341	225	
B2	961	625	463	305	862	562	418	275	762	498	370	244	699	458	341	225	632	414	308	204	
C	428	280	209	138	385	253	188	124	341	224	167	111	313	206	154	102	283	187	139	92	
D	303	199	149	98	273	180	134	89	242	160	119	79	222	147	110	73	201	133	100	66	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1407	1002	738	483	1267	819	605	398	1139	739	547	360	1072	696	516	339	991	645	479	315	
B1	969	630	467	307	792	518	384	254	714	467	347	230	674	441	328	217	624	409	304	202	
B2	873	569	422	278	714	467	347	230	645	422	314	208	608	398	297	196	563	370	275	182	
C	389	256	190	126	320	210	157	104	289	190	142	94	273	180	134	89	253	167	125	83	
D	276	182	136	90	227	150	112	74	205	136	101	67	194	128	96	64	180	119	89	59	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	932	688	451	1372	932	688	451	1242	803	594	390	1102	716	530	349	966	629	467	307	
B1	902	587	435	287	902	587	435	287	777	508	377	249	692	454	337	222	608	399	297	196	
B2	812	530	394	260	812	530	394	260	701	459	341	226	625	410	305	202	549	361	269	178	
C	363	238	178	117	363	238	178	117	314	207	154	102	280	185	138	91	247	163	121	81	
D	257	170	127	84	257	170	127	84	223	147	110	73	199	132	98	65	176	116	87	58	

Angle		20° < α ≤ 25°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1305	843	623	409	1169	758	561	369	1031	671	496	327	945	616	456	301	853	557	413	273	
B1	815	532	395	261	733	479	356	235	648	425	316	209	595	390	290	192	538	354	263	174	
B2	735	481	358	236	661	434	322	213	585	384	286	189	538	354	263	174	486	320	238	158	
C	329	216	161	107	296	195	146	96	263	173	129	86	242	160	119	79	219	145	108	72	
D	234	154	115	76	211	139	104	69	187	124	92	61	172	114	85	57	156	103	77	51	

Angle		20° < α ≤ 25°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1183	767	567	373	966	629	467	307	870	568	422	278	819	536	398	263	759	496	369	244	
B1	742	485	360	238	608	399	297	196	549	361	269	178	518	341	254	168	480	316	235	156	
B2	669	438	326	215	549	361	269	178	496	326	243	161	468	308	230	152	434	286	213	141	
C	300	197	147	98	247	163	121	81	223	147	110	73	211	139	104	69	195	129	97	64	
D	213	141	105	70	176	116	87	58	159	105	79	52	150	99	74	49	139	92	69	46	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																		
TC		3																		
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	932	688	451	1372	932	688	451	1242	803	594	390	1102	716	530	349	966	629	467	307
B1	902	587	435	287	902	587	435	287	777	508	377	249	692	454	337	222	608	399	297	196
B2	812	530	394	260	812	530	394	260	701	459	341	226	625	410	305	202	549	361	269	178
C	363	238	178	117	363	238	178	117	314	207	154	102	280	185	138	91	247	163	121	81
D	257	170	127	84	257	170	127	84	223	147	110	73	199	132	98	65	176	116	87	58

Angle		25° < α < 30°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1305	843	623	409	1169	758	561	369	1031	671	496	327	945	616	456	301	853	557	413	273	
B1	815	532	395	261	733	479	356	235	648	425	316	209	595	390	290	192	538	354	263	174	
B2	735	481	358	236	661	434	322	213	585	384	286	189	538	354	263	174	486	320	238	158	
C	329	216	161	107	296	195	146	96	263	173	129	86	242	160	119	79	219	145	108	72	
D	234	154	115	76	211	139	104	69	187	124	92	61	172	114	85	57	156	103	77	51	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1183	767	567	373	966	629	467	307	870	568	422	278	819	536	398	263	759	496	369	244	
B1	742	485	360	238	608	399	297	196	549	361	269	178	518	341	254	168	480	316	235	156	
B2	669	438	326	215	549	361	269	178	496	326	243	161	468	308	230	152	434	286	213	141	
C	300	197	147	98	247	163	121	81	223	147	110	73	211	139	104	69	195	129	97	64	
D	213	141	105	70	176	116	87	58	159	105	79	52	150	99	74	49	139	92	69	46	

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC		3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1162	753	558	366	1162	753	558	366	1000	650	482	318	889	581	431	284	780	510	379	250	
B1	728	477	354	234	728	477	354	234	629	413	306	202	561	369	274	182	493	325	242	160	
B2	657	430	320	212	657	430	320	212	568	373	278	184	506	334	248	164	446	294	219	145	
C	295	194	145	96	295	194	145	96	255	168	126	83	228	151	112	75	201	133	99	66	
D	209	138	103	69	209	138	103	69	181	120	90	60	162	107	80	53	143	95	71	47	

Angle		$\alpha = 30^\circ$																			
TC		2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1050	683	506	332	942	614	456	300	832	543	404	266	763	500	371	246	690	452	337	222	
B1	659	432	322	212	594	390	290	192	526	346	258	170	483	318	237	157	437	288	214	142	
B2	595	391	291	192	536	352	262	174	474	313	233	154	437	288	214	142	395	261	194	129	
C	267	176	131	87	241	159	119	79	214	141	105	70	197	130	97	65	178	118	88	59	
D	190	126	94	62	171	114	85	56	152	101	75	50	140	93	69	46	127	84	63	42	

Angle		$\alpha = 30^\circ$																		
TC	2																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	953	621	461	303	780	510	379	250	704	462	343	227	663	435	324	214	615	404	300	199
B1	600	394	293	194	493	325	242	160	446	294	219	145	420	277	206	137	390	258	192	127
B2	542	356	266	175	446	294	219	145	403	266	198	131	380	251	187	124	353	233	174	115
C	244	161	120	80	201	133	99	66	182	120	90	60	171	114	85	56	159	105	79	52
D	173	115	86	57	143	95	71	47	130	86	64	43	122	81	61	40	114	75	56	38

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
 Type of Interface ER-I-32/AU and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		0° < α ≤ 10°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352	
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1220	1532	1374	1293	1181	1483	1327	1247	1138	
B2	1591	1433	1350	1235	1591	1433	1350	1235	1536	1379	1297	1186	1494	1338	1257	1147	1446	1291	1212	1092	
C	916	820	770	702	916	820	770	702	883	787	739	630	857	763	715	569	827	735	689	507	
D	837	744	697	527	837	744	697	527	804	714	668	462	779	691	610	416	751	665	543	369	

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1307
B1	1592	1434	1350	1236	1553	1395	1313	1200	1507	1350	1270	1159	1475	1320	1240	1131	1438	1284	1206	1074
B2	1554	1396	1314	1202	1514	1358	1277	1166	1469	1314	1234	1126	1438	1284	1205	1072	1400	1248	1171	980
C	894	798	749	658	869	775	727	599	842	749	702	537	823	731	684	497	800	710	664	454
D	815	724	678	482	792	702	641	438	765	677	575	392	747	661	533	362	726	637	487	330

Angle		0° < α ≤ 10°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1427	1734	1566	1476	1352	1693	1525	1437	1315	1670	1502	1414	1294	1640	1472	1386	1266	
B1	1557	1399	1317	1204	1483	1327	1247	1138	1446	1291	1212	1092	1423	1270	1192	1037	1395	1244	1166	969	
B2	1519	1362	1281	1170	1446	1291	1212	1092	1407	1255	1178	998	1386	1234	1158	946	1358	1209	1133	884	
C	872	777	729	605	827	735	689	507	805	714	668	462	792	702	641	438	775	687	599	408	
D	794	704	648	442	751	665	543	369	730	645	495	336	718	616	470	319	702	575	438	297	

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406 (cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
 Type of Interface ER-I-32/AU and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1435	1348	1209	1601	1435	1348	1209	1543	1379	1285	1074	1498	1336	1238	958	1448	1280	1185	842	
B1	1360	1202	1112	786	1360	1202	1112	786	1307	1143	1038	680	1266	1099	926	607	1216	1052	814	534	
B2	1323	1160	1074	710	1323	1160	1074	710	1271	1104	938	615	1228	1062	836	550	1174	993	735	484	
C	748	648	486	320	748	648	486	320	712	567	420	277	684	506	375	248	655	445	331	218	
D	665	464	345	228	665	464	345	228	613	402	299	198	546	359	267	177	480	316	235	156	

Angle		10° < α ≤ 15°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1397	1305	1127	1520	1357	1261	1013	1472	1309	1211	897	1440	1271	1176	825	1401	1227	1137	745	
B1	1324	1162	1076	713	1286	1121	980	642	1243	1075	867	570	1207	1045	797	524	1166	973	721	474	
B2	1288	1122	983	645	1250	1082	885	581	1200	1038	783	515	1166	972	720	474	1126	878	651	430	
C	723	595	441	290	698	535	397	262	669	474	352	232	651	436	324	214	601	394	293	194	
D	643	421	313	207	578	379	282	187	512	336	251	166	470	310	231	153	426	280	209	139	

Angle		10° < α ≤ 15°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1266	1025	1448	1280	1185	842	1408	1236	1145	761	1386	1211	1096	717	1357	1181	1015	666	
B1	1290	1125	991	650	1216	1052	814	534	1174	993	735	484	1150	936	694	457	1121	867	643	424	
B2	1254	1086	894	587	1174	993	735	484	1134	896	664	438	1111	845	626	414	1082	783	582	384	
C	700	541	401	265	655	445	331	218	613	402	299	198	578	379	282	187	536	352	262	173	
D	585	384	286	189	480	316	235	156	434	286	213	141	409	270	201	133	380	251	187	124	

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406 (cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
 Type of Interface ER-I-32/AU and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1297	1200	874	1482	1297	1200	874	1425	1233	1142	756	1374	1186	1029	675	1312	1136	904	594	
B1	1232	1066	845	555	1232	1066	845	555	1171	986	730	481	1126	880	652	430	1078	774	574	379	
B2	1190	1030	763	502	1190	1030	763	502	1131	890	660	435	1088	794	590	389	1042	698	519	343	
C	664	462	343	227	664	462	343	227	610	400	297	197	544	357	266	176	478	314	234	155	
D	499	328	244	162	499	328	244	162	431	284	212	140	385	254	190	126	339	224	167	111	

Angle		15° < α ≤ 20°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1254	1161	792	1401	1210	1090	714	1342	1160	964	632	1303	1127	886	582	1259	1082	802	527	
B1	1191	1031	766	504	1149	931	690	454	1102	824	611	403	1070	758	562	371	1034	685	510	337	
B2	1150	934	692	456	1109	841	623	411	1064	744	553	365	1034	685	509	336	944	619	461	305	
C	639	419	312	206	575	377	281	186	509	335	249	165	468	308	230	152	423	279	208	138	
D	452	298	222	147	407	269	200	133	361	238	178	118	332	220	164	109	301	199	149	99	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1407	1214	1102	722	1312	1136	904	594	1267	1097	817	537	1242	1040	771	507	1210	964	715	471	
B1	1153	942	698	459	1078	774	574	379	1042	698	519	343	1006	659	490	324	932	611	455	301	
B2	1114	850	630	416	1042	698	519	343	963	632	470	310	908	596	443	294	842	553	412	272	
C	582	382	284	188	478	314	234	155	432	285	212	141	407	269	200	133	378	249	186	123	
D	412	272	203	134	339	224	167	111	307	203	152	101	290	192	143	95	269	178	133	88	

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406 (cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
 Type of Interface ER-I-32/AU and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle $20^\circ < \alpha \leq 25^\circ$																				
TC	3																			
Building Height (m)	≤ 5				5<H $\leq$ 10				10<H $\leq$ 15				15<H $\leq$ 20				20<H $\leq$ 30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	1185	1027	673	1372	1185	1027	673	1304	1128	887	583	1254	1070	792	521	1199	939	697	459
B1	1126	878	650	429	1126	878	650	429	1071	758	563	372	1030	678	503	333	908	596	443	294
B2	1087	793	588	388	1087	793	588	388	1035	686	510	337	934	612	455	302	820	539	402	266
C	542	356	265	176	542	356	265	176	469	309	230	152	419	276	206	136	368	243	181	120
D	384	254	189	125	384	254	189	125	333	220	164	109	298	197	147	98	262	174	130	86

Angle $20^\circ < \alpha \leq 25^\circ$																				
TC	2.5																			
Building Height (m)	≤ 5				5<H $\leq$ 10				10<H $\leq$ 15				15<H $\leq$ 20				20<H $\leq$ 30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1326	1146	931	611	1278	1106	838	551	1226	1001	742	489	1191	921	683	450	1150	832	618	408
B1	1089	795	590	390	1050	716	532	351	968	634	472	312	890	584	434	287	804	529	394	261
B2	1052	718	534	353	988	647	482	318	874	574	427	282	803	528	394	260	726	478	356	236
C	492	323	241	160	443	292	217	144	392	259	193	128	361	238	178	118	327	216	161	107
D	349	230	172	114	315	208	155	103	279	185	138	92	257	170	127	84	233	154	115	77

Angle $20^\circ < \alpha \leq 25^\circ$																				
TC	2																			
Building Height (m)	≤ 5				5<H $\leq$ 10				10<H $\leq$ 15				15<H $\leq$ 20				20<H $\leq$ 30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1284	1110	847	557	1199	939	697	459	1159	848	630	416	1136	801	594	393	1107	742	552	365
B1	1054	725	538	355	908	596	443	294	820	539	402	266	774	509	379	251	717	472	352	233
B2	999	655	487	322	820	539	402	266	741	488	363	241	699	460	343	227	648	427	318	211
C	448	295	220	146	368	243	181	120	333	220	164	109	315	208	155	103	292	193	144	96
D	318	210	157	104	262	174	130	86	237	157	118	78	224	149	111	74	208	138	103	69

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 406 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface ER-I-32/AU and ER-I-34
Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	1027	673	1372	1185	1027	673	1304	1128	887	583	1254	1070	792	521	1199	939	697	459	
B1	1126	878	650	429	1126	878	650	429	1071	758	563	372	1030	678	503	333	908	596	443	294	
B2	1087	793	588	388	1087	793	588	388	1035	686	510	337	934	612	455	302	820	539	402	266	
C	542	356	265	176	542	356	265	176	469	309	230	152	419	276	206	136	368	243	181	120	
D	384	254	189	125	384	254	189	125	333	220	164	109	298	197	147	98	262	174	130	86	

Angle		25° < α < 30°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	1146	931	611	1278	1106	838	551	1226	1001	742	489	1191	921	683	450	1150	832	618	408	
B1	1089	795	590	390	1050	716	532	351	968	634	472	312	890	584	434	287	804	529	394	261	
B2	1052	718	534	353	988	647	482	318	874	574	427	282	803	528	394	260	726	478	356	236	
C	492	323	241	160	443	292	217	144	392	259	193	128	361	238	178	118	327	216	161	107	
D	349	230	172	114	315	208	155	103	279	185	138	92	257	170	127	84	233	154	115	77	

Angle		25° < α < 30°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1284	1110	847	557	1199	939	697	459	1159	848	630	416	1136	801	594	393	1107	742	552	365	
B1	1054	725	538	355	908	596	443	294	820	539	402	266	774	509	379	251	717	472	352	233	
B2	999	655	487	322	820	539	402	266	741	488	363	241	699	460	343	227	648	427	318	211	
C	448	295	220	146	368	243	181	120	333	220	164	109	315	208	155	103	292	193	144	96	
D	318	210	157	104	262	174	130	86	237	157	118	78	224	149	111	74	208	138	103	69	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT KLIP-LOK 406 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-32/AU and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC	3																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1276	1104	833	547	1276	1104	833	547	1213	972	721	474	1167	867	643	424	1117	762	566	374	
B1	1048	712	529	350	1048	712	529	350	939	616	458	303	838	550	410	271	737	485	362	239	
B2	982	644	478	316	982	644	478	316	848	558	415	274	757	498	371	246	666	438	327	217	
C	440	290	216	143	440	290	216	143	381	251	188	124	340	225	168	111	300	198	148	98	
D	313	207	154	102	313	207	154	102	271	179	134	89	242	161	120	80	214	142	106	70	

Angle		$\alpha = 30^\circ$																			
TC	2.5																				
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1233	1019	755	497	1189	917	680	449	1141	813	604	398	1109	747	555	366	1031	676	502	332	
B1	986	646	480	318	886	582	434	286	785	516	385	254	722	475	354	234	653	430	321	213	
B2	890	584	434	287	801	526	392	259	710	467	348	230	652	430	321	213	590	390	290	193	
C	399	263	196	130	360	238	177	118	319	211	157	105	294	194	145	96	266	176	132	87	
D	284	188	140	93	256	170	127	84	227	151	113	75	209	139	104	69	190	126	94	63	

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1194	928	689	454	1117	762	566	374	1051	689	513	338	991	650	484	320	918	604	449	297	
B1	897	589	438	290	737	485	362	239	666	438	327	217	628	414	309	205	582	385	287	190	
B2	810	533	397	262	666	438	327	217	602	397	296	196	568	375	280	186	527	348	260	172	
C	364	240	179	119	300	198	148	98	271	180	134	89	256	170	127	84	238	158	118	78	
D	259	171	128	85	214	142	106	70	194	128	96	64	183	121	91	60	170	113	84	56	

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1220	1532	1374	1293	1181	1483	1327	1247	1123
B2	1591	1433	1350	1235	1591	1433	1350	1235	1536	1379	1297	1186	1494	1338	1257	1147	1446	1291	1212	1026
C	916	820	770	674	916	820	770	674	883	787	739	593	857	763	715	535	827	735	689	476
D	837	744	697	495	837	744	697	495	804	714	635	434	779	691	573	391	751	665	511	347

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1307	
B1	1592	1434	1350	1236	1553	1395	1313	1200	1507	1350	1270	1159	1475	1320	1240	1103	1438	1284	1206	1009	
B2	1554	1396	1314	1202	1514	1358	1277	1166	1469	1314	1234	1086	1438	1284	1205	1008	1400	1248	1171	922	
C	894	798	749	618	869	775	727	563	842	749	702	504	823	731	682	467	800	710	624	426	
D	815	724	662	453	792	702	603	412	765	677	541	368	747	655	501	341	726	599	457	310	

Angle	0° < α ≤ 10°																			
TC	2																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1644	1554	1427	1734	1566	1476	1352	1693	1525	1437	1315	1670	1502	1414	1294	1640	1472	1386	1266
B1	1557	1399	1317	1204	1483	1327	1247	1123	1446	1291	1212	1026	1423	1270	1192	974	1395	1244	1166	910
B2	1519	1362	1281	1170	1446	1291	1212	1026	1407	1255	1178	938	1386	1234	1158	890	1358	1209	1133	831
C	872	777	729	568	827	735	689	476	805	714	635	434	792	702	603	412	775	687	563	384
D	794	704	609	416	751	665	511	347	730	610	466	316	718	579	441	299	702	541	412	279

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA (cont)

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1601	1435	1348	1170	1601	1435	1348	1170	1543	1379	1285	1010	1498	1336	1238	900	1448	1280	1185	791
B1	1360	1202	1112	739	1360	1202	1112	739	1307	1143	976	639	1266	1099	870	571	1216	1034	765	502
B2	1323	1160	1020	668	1323	1160	1020	668	1271	1104	881	578	1228	1062	786	516	1174	933	690	454
C	748	617	457	300	748	617	457	300	712	533	395	260	684	475	353	233	639	418	311	205
D	665	436	324	214	665	436	324	214	576	378	281	186	514	337	251	166	451	297	221	147

Angle		10° < α ≤ 15°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1561	1397	1305	1059	1520	1357	1261	953	1472	1309	1211	843	1440	1271	1176	775	1401	1227	1071	701
B1	1324	1162	1024	670	1286	1121	921	604	1243	1075	814	535	1207	1013	749	493	1166	914	678	446
B2	1288	1122	924	606	1250	1082	831	546	1200	994	736	484	1166	914	677	446	1126	826	612	403
C	723	559	414	273	698	503	373	246	669	445	331	218	626	410	304	201	565	371	276	182
D	604	396	294	194	543	357	265	176	481	316	236	156	442	291	217	144	400	264	197	130

Angle	10° < α ≤ 15°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1525	1362	1266	964	1448	1280	1185	791	1408	1236	1092	715	1386	1211	1029	674	1357	1181	954	626
B1	1290	1125	931	610	1216	1034	765	502	1174	933	690	454	1150	879	651	429	1121	815	604	398
B2	1254	1086	841	552	1174	933	690	454	1134	842	624	411	1111	794	589	388	1082	736	546	361
C	700	509	377	249	639	418	311	205	576	378	281	186	543	357	265	176	504	331	246	163
D	550	361	268	178	451	297	221	147	408	269	200	133	385	254	189	125	357	236	176	117

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA (cont)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1297	1200	822	1482	1297	1200	822	1425	1233	1086	711	1374	1186	968	635	1312	1136	850	558	
B1	1232	1066	794	522	1232	1066	794	522	1171	927	686	452	1126	827	613	404	1078	726	539	356	
B2	1190	969	718	472	1190	969	718	472	1131	837	621	409	1088	746	554	366	1003	657	488	322	
C	664	434	322	213	664	434	322	213	573	376	279	185	511	336	250	165	449	296	220	146	
D	469	308	230	152	469	308	230	152	405	267	199	132	362	239	178	118	319	211	157	104	

Angle	15° < α ≤ 20°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1444	1254	1139	745	1401	1210	1024	671	1342	1160	906	595	1303	1126	833	547	1259	1017	753	496
B1	1191	973	720	474	1149	875	648	427	1102	774	574	379	1070	712	529	349	983	644	478	316
B2	1150	878	650	429	1109	790	586	386	1064	699	519	343	982	643	478	316	887	582	433	286
C	601	394	293	194	541	355	264	175	478	315	234	155	440	290	216	143	398	262	196	130
D	425	280	209	138	383	252	188	125	339	224	167	111	312	206	154	102	283	187	140	93

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1407	1214	1036	678	1312	1136	850	558	1267	1038	768	505	1242	978	724	477	1210	906	672	443	
B1	1153	885	656	432	1078	726	539	356	1003	657	488	322	946	619	461	304	876	574	427	282	
B2	1114	799	593	390	1003	657	488	322	906	594	442	292	854	560	417	276	791	520	387	256	
C	547	359	267	177	449	296	220	146	406	267	199	132	383	252	188	125	355	234	175	116	
D	387	255	190	126	319	211	157	104	288	191	142	95	272	180	135	89	253	167	125	83	

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA (cont)

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	966	633	1372	1185	966	633	1304	1128	834	548	1254	1006	745	490	1199	883	655	432	
B1	1126	825	611	403	1126	825	611	403	1071	713	530	350	972	637	474	313	854	560	417	276	
B2	1087	745	553	365	1087	745	553	365	984	644	479	317	878	575	428	283	771	506	378	250	
C	510	335	249	165	510	335	249	165	441	290	216	143	393	259	193	128	346	229	171	113	
D	361	238	178	118	361	238	178	118	313	207	154	102	280	185	138	92	246	163	122	81	

Angle		20° < α ≤ 25°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	1146	875	575	1278	1064	787	518	1226	941	698	459	1191	865	642	422	1150	782	581	383	
B1	1089	747	555	366	1029	673	500	330	910	597	444	294	836	549	409	270	756	497	370	245	
B2	1033	675	502	331	928	609	453	299	822	539	402	266	755	496	370	245	683	450	335	222	
C	462	304	226	150	416	274	204	135	369	243	181	120	339	224	167	111	307	203	152	101	
D	328	217	162	107	296	195	146	97	262	174	130	86	241	160	119	79	219	145	108	72	

Angle		20° < α ≤ 25°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1284	1077	796	524	1199	883	655	432	1159	797	592	391	1136	752	558	369	1066	698	519	343	
B1	1041	681	506	334	854	560	417	276	771	506	378	250	727	478	356	236	674	444	330	219	
B2	939	615	458	302	771	506	378	250	696	458	342	226	657	433	322	214	610	402	299	198	
C	421	277	207	137	346	229	171	113	313	207	154	103	296	195	146	97	274	181	136	90	
D	299	198	148	98	246	163	122	81	223	148	110	73	211	140	104	69	196	130	97	64	

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA (cont)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	1185	966	633	1372	1185	966	633	1304	1128	834	548	1254	1006	745	490	1199	883	655	432
B1	1126	825	611	403	1126	825	611	403	1071	713	530	350	972	637	474	313	854	560	417	276
B2	1087	745	553	365	1087	745	553	365	984	644	479	317	878	575	428	283	771	506	378	250
C	510	335	249	165	510	335	249	165	441	290	216	143	393	259	193	128	346	229	171	113
D	361	238	178	118	361	238	178	118	313	207	154	102	280	185	138	92	246	163	122	81

Angle		25° < α < 30°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	1146	875	575	1278	1064	787	518	1226	941	698	459	1191	865	642	422	1150	782	581	383	
B1	1089	747	555	366	1029	673	500	330	910	597	444	294	836	549	409	270	756	497	370	245	
B2	1033	675	502	331	928	609	453	299	822	539	402	266	755	496	370	245	683	450	335	222	
C	462	304	226	150	416	274	204	135	369	243	181	120	339	224	167	111	307	203	152	101	
D	328	217	162	107	296	195	146	97	262	174	130	86	241	160	119	79	219	145	108	72	

Angle	25° < α < 30°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1284	1077	796	524	1199	883	655	432	1159	797	592	391	1136	752	558	369	1066	698	519	343
B1	1041	681	506	334	854	560	417	276	771	506	378	250	727	478	356	236	674	444	330	219
B2	939	615	458	302	771	506	378	250	696	458	342	226	657	433	322	214	610	402	299	198
C	421	277	207	137	346	229	171	113	313	207	154	103	296	195	146	97	274	181	136	90
D	299	198	148	98	246	163	122	81	223	148	110	73	211	140	104	69	196	130	97	64

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA (cont)

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$\alpha = 30^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1276	1058	783	515	1276	1058	783	515	1213	914	677	446	1167	815	605	399	1096	717	532	352
B1	1022	670	498	329	1022	670	498	329	883	579	431	285	788	518	386	255	693	456	339	225
B2	923	605	450	298	923	605	450	298	798	524	390	258	711	468	349	231	626	412	307	204
C	414	272	203	135	414	272	203	135	358	236	176	117	320	211	158	105	282	186	139	92
D	294	194	145	96	294	194	145	96	255	169	126	84	228	151	113	75	201	133	100	66

Angle	$\alpha = 30^\circ$																			
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1233	958	710	468	1189	862	639	422	1141	763	567	374	1073	702	522	344	969	635	473	312
B1	926	607	451	298	834	547	407	270	738	485	362	239	678	446	333	220	614	405	302	200
B2	836	549	409	270	753	494	369	244	666	439	327	217	613	404	302	200	555	366	273	181
C	375	247	185	122	338	223	167	111	300	198	148	98	276	183	136	91	250	166	124	82
D	267	177	132	88	241	159	119	79	214	142	106	70	197	130	98	65	178	118	89	59

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1194	872	647	426	1096	717	532	352	989	648	482	318	932	611	455	301	864	567	422	279	
B1	843	554	412	272	693	456	339	225	626	412	307	204	590	390	290	192	548	362	270	178	
B2	762	500	373	246	626	412	307	204	566	374	278	185	534	352	263	174	495	327	244	162	
C	342	226	168	112	282	186	139	92	255	169	126	84	241	159	119	79	224	148	111	74	
D	243	161	120	80	201	133	100	66	182	121	90	60	172	114	85	57	160	106	79	53	

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		0° < α ≤ 10°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352	
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1220	1532	1374	1293	1181	1483	1327	1247	1123	
B2	1591	1433	1350	1235	1591	1433	1350	1235	1536	1379	1297	1186	1494	1338	1257	1147	1446	1291	1212	1026	
C	916	820	770	674	916	820	770	674	883	787	739	593	857	763	715	535	827	735	689	476	
D	837	744	697	495	837	744	697	495	804	714	635	434	779	691	573	391	751	665	511	347	

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1307
B1	1592	1434	1350	1236	1553	1395	1313	1200	1507	1350	1270	1159	1475	1320	1240	1103	1438	1284	1206	1009
B2	1554	1396	1314	1202	1514	1358	1277	1166	1469	1314	1234	1086	1438	1284	1205	1008	1400	1248	1171	922
C	894	798	749	618	869	775	727	563	842	749	702	504	823	731	682	467	800	710	624	426
D	815	724	662	453	792	702	603	412	765	677	541	368	747	655	501	341	726	599	457	310

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1573	1255	893	1734	1359	1074	757	1693	1256	989	694	1650	1200	944	660	1561	1131	886	618	
B1	1510	1095	859	601	1305	935	729	506	1207	861	669	462	1154	820	636	439	1086	770	595	410	
B2	1401	1010	790	550	1207	861	669	462	1115	791	613	422	1065	753	582	401	1002	706	545	374	
C	679	480	372	256	579	407	313	215	533	372	286	196	508	354	272	185	476	331	254	173	
D	512	357	274	187	434	301	230	156	398	275	210	142	378	261	199	135	354	244	186	126	

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface ER-I-09 and ER-I-34
Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1453	1046	815	527	1453	1046	815	527	1301	928	700	455	1191	845	623	405	1074	743	546	356	
B1	1005	694	510	333	1005	694	510	333	893	597	439	288	813	531	392	257	719	466	344	226	
B2	926	625	459	301	926	625	459	301	821	538	397	260	740	478	354	233	647	420	311	205	
C	429	278	206	135	429	278	206	135	369	240	178	117	328	214	159	105	288	188	140	92	
D	301	197	146	96	301	197	146	96	259	170	127	84	231	152	113	75	203	134	100	66	

Angle		10° < α ≤ 15°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1349	966	736	477	1244	885	660	429	1131	794	582	380	1057	728	535	349	974	655	482	315	
B1	928	626	461	302	851	562	414	272	769	497	367	241	704	456	338	222	634	412	305	201	
B2	854	565	416	273	782	507	374	246	691	448	331	218	633	411	305	201	570	372	276	182	
C	387	252	187	123	348	227	168	111	307	201	149	98	282	185	137	91	255	167	124	82	
D	272	178	133	88	245	161	120	79	217	142	106	70	199	131	98	65	180	119	89	59	

Angle		10° < α ≤ 15°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1255	893	668	434	1074	743	546	356	989	669	492	322	944	630	464	303	886	582	429	281	
B1	859	569	419	275	719	466	344	226	647	420	311	205	609	396	294	193	563	367	272	179	
B2	790	513	378	249	647	420	311	205	582	379	281	185	549	358	265	174	507	331	246	162	
C	352	229	170	112	288	188	140	92	260	170	127	84	245	161	120	79	227	149	111	73	
D	248	162	121	80	203	134	100	66	184	121	90	60	173	114	85	57	161	106	79	53	

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	15° < α ≤ 20°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1153	773	567	370	1153	773	567	370	1027	665	489	320	918	591	436	286	802	519	383	252
B1	748	484	358	235	748	484	358	235	643	418	309	203	572	372	276	182	501	327	243	160
B2	673	437	323	212	673	437	323	212	579	377	279	184	515	336	250	165	452	296	220	145
C	299	196	145	96	299	196	145	96	258	169	126	83	230	151	113	75	202	133	99	66
D	211	139	103	69	211	139	103	69	183	120	90	59	163	108	80	53	144	95	71	47

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1067	698	513	336	974	626	462	302	857	553	408	268	784	507	375	247	706	458	339	223	
B1	675	438	324	213	606	394	292	192	534	349	258	170	490	321	238	157	443	290	215	142	
B2	608	395	293	193	546	356	264	174	482	315	234	154	442	290	215	142	400	262	195	129	
C	271	177	132	87	244	160	119	79	216	142	106	70	198	130	97	64	179	118	88	58	
D	192	126	94	62	173	114	85	56	153	101	75	50	141	93	69	46	127	84	63	42	

Angle		15° < α ≤ 20°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	986	633	467	305	802	519	383	252	721	468	346	228	678	440	326	214	627	408	303	199
B1	613	398	295	194	501	327	243	160	452	296	220	145	426	279	207	137	394	258	193	127
B2	552	360	267	176	452	296	220	145	408	267	198	131	384	252	187	124	356	234	174	115
C	246	162	120	80	202	133	99	66	183	120	90	60	173	114	85	56	160	106	79	52
D	174	115	86	57	144	95	71	47	130	86	64	43	123	81	61	40	114	75	56	37

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																		
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	915	590	434	285	915	590	434	285	785	508	376	247	698	453	335	220	610	398	295	194
B1	570	371	275	182	570	371	275	182	491	321	238	158	438	286	213	141	384	252	188	124
B2	514	335	249	164	514	335	249	164	443	290	215	142	395	259	193	127	347	228	170	112
C	230	151	112	74	230	151	112	74	199	131	97	65	177	117	87	58	156	103	77	51
D	163	107	80	53	163	107	80	53	141	93	70	46	126	83	62	41	111	74	55	36

Angle		20° < α ≤ 25°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	825	533	394	258	740	479	354	233	652	424	314	207	598	389	289	190	539	352	261	173
B1	516	337	250	165	463	303	225	149	410	269	200	132	377	247	184	122	340	224	166	110
B2	465	304	226	149	418	274	204	134	370	243	181	119	340	223	166	110	307	202	150	100
C	208	137	102	68	187	123	92	61	166	110	82	54	153	101	75	50	138	91	68	45
D	148	98	73	48	133	88	66	44	118	78	58	39	109	72	54	36	99	65	49	32

Angle		20° < α ≤ 25°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	748	485	359	235	610	398	295	194	550	360	267	176	519	338	252	166	480	314	234	154
B1	469	306	228	150	384	252	188	124	347	228	170	112	327	215	160	106	303	200	149	98
B2	423	277	206	136	347	228	170	112	314	206	154	102	296	194	145	96	274	181	134	89
C	190	125	93	62	156	103	77	51	141	93	70	46	133	88	66	44	124	82	61	41
D	135	89	66	44	111	74	55	36	101	67	50	33	95	63	47	31	88	58	44	-27

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	915	590	434	285	915	590	434	285	785	508	376	247	698	453	335	220	610	398	295	194	
B1	570	371	275	182	570	371	275	182	491	321	238	158	438	286	213	141	384	252	188	124	
B2	514	335	249	164	514	335	249	164	443	290	215	142	395	259	193	127	347	228	170	112	
C	230	151	112	74	230	151	112	74	199	131	97	65	177	117	87	58	156	103	77	51	
D	163	107	80	53	163	107	80	53	141	93	70	46	126	83	62	41	111	74	55	36	

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	825	533	394	258	740	479	354	233	652	424	314	207	598	389	289	190	539	352	261	173	
B1	516	337	250	165	463	303	225	149	410	269	200	132	377	247	184	122	340	224	166	110	
B2	465	304	226	149	418	274	204	134	370	243	181	119	340	223	166	110	307	202	150	100	
C	208	137	102	68	187	123	92	61	166	110	82	54	153	101	75	50	138	91	68	45	
D	148	98	73	48	133	88	66	44	118	78	58	39	109	72	54	36	99	65	49	32	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	748	485	359	235	610	398	295	194	550	360	267	176	519	338	252	166	480	314	234	154	
B1	469	306	228	150	384	252	188	124	347	228	170	112	327	215	160	106	303	200	149	98	
B2	423	277	206	136	347	228	170	112	314	206	154	102	296	194	145	96	274	181	134	89	
C	190	125	93	62	156	103	77	51	141	93	70	46	133	88	66	44	124	82	61	41	
D	135	89	66	44	111	74	55	36	101	67	50	33	95	63	47	31	88	58	44	-27	

PV-ezRack SolarRoof Interface spacing table for **FIELDERS KINGKLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																		
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	735	477	353	232	735	477	353	232	632	411	305	201	563	367	272	179	493	323	240	158
B1	461	302	224	148	461	302	224	148	398	261	194	128	354	233	174	114	312	205	153	101
B2	416	272	202	134	416	272	202	134	359	236	175	116	320	210	157	104	282	186	138	91
C	186	123	92	61	186	123	92	61	161	106	79	53	144	95	71	47	127	84	63	42
D	132	88	65	43	132	88	65	43	115	76	57	38	103	68	51	34	91	60	45	30

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	664	432	320	210	596	388	288	190	526	343	255	168	483	316	235	155	436	286	213	140
B1	417	274	203	134	375	246	183	121	332	218	162	107	306	201	150	99	276	182	136	90
B2	377	247	184	122	339	222	166	110	300	198	147	98	276	182	135	90	250	165	123	82
C	169	111	83	55	152	101	75	50	135	89	67	44	124	82	61	41	113	75	56	37
D	120	80	59	39	108	72	54	36	96	64	48	32	89	59	44	-	80	53	40	-

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	603	393	292	192	493	323	240	158	445	292	217	143	419	275	205	135	388	255	190	126	
B1	379	249	186	122	312	205	153	101	282	186	138	91	266	175	130	86	246	162	122	80	
B2	342	226	168	111	282	186	138	91	254	168	126	83	240	158	118	78	223	147	110	73	
C	154	102	76	50	127	84	63	42	115	76	57	38	108	72	54	36	101	67	50	33	
D	110	73	54	36	91	60	45	30	82	54	41	-27	77	51	38	-	72	-	-	-	

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1406	1012	1887	1720	1406	1012	1830	1575	1259	898	1785	1448	1152	818	1734	1315	1040	734
B1	1630	1230	973	686	1630	1230	973	686	1510	1099	864	605	1390	1005	786	548	1262	906	706	490
B2	1558	1138	896	629	1558	1138	896	629	1403	1014	794	554	1289	926	722	502	1168	833	647	447
C	762	545	424	294	762	545	424	294	681	483	375	258	622	439	339	233	561	393	303	208
D	581	408	315	216	581	408	315	216	515	360	277	189	469	326	250	170	420	291	223	151

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1849	1629	1306	934	1808	1510	1204	857	1760	1380	1094	774	1726	1295	1023	720	1642	1198	943	660	
B1	1562	1141	898	630	1449	1050	824	576	1325	954	745	518	1243	890	694	481	1150	819	636	440	
B2	1453	1054	826	578	1344	969	757	527	1226	878	683	474	1150	818	636	439	1062	753	583	402	
C	707	503	390	270	651	461	356	245	590	415	320	220	551	386	298	204	507	354	272	186	
D	536	375	289	197	491	342	263	179	443	308	236	161	413	286	218	149	379	261	199	135	

Angle	0° < α ≤ 10°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1522	1215	864	1734	1315	1040	734	1665	1216	958	672	1596	1162	913	639	1511	1094	858	598
B1	1461	1060	832	582	1262	906	706	490	1168	833	647	447	1116	794	615	425	1051	745	576	397
B2	1356	978	764	532	1168	833	647	447	1079	766	593	409	1030	729	563	388	970	683	527	362
C	657	465	360	248	561	393	303	208	516	360	277	189	491	342	263	179	461	320	246	167
D	496	346	266	181	420	291	223	151	385	266	203	138	366	252	192	131	343	236	180	122

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1406	1012	789	510	1406	1012	789	510	1259	898	678	440	1152	818	603	393	1040	719	528	345	
B1	973	671	493	322	973	671	493	322	864	578	426	278	786	514	379	249	696	450	333	219	
B2	896	604	445	291	896	604	445	291	794	520	384	252	716	463	342	225	626	406	301	198	
C	415	269	199	131	415	269	199	131	357	232	172	114	318	207	154	102	279	182	135	90	
D	291	190	141	93	291	190	141	93	251	165	122	81	224	147	110	72	197	130	97	64	

Angle		10° < α ≤ 15°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1306	934	712	462	1204	857	638	415	1094	768	564	367	1023	704	517	337	943	634	467	305	
B1	898	606	446	292	824	544	402	263	744	481	355	233	681	442	326	214	614	398	295	194	
B2	826	546	402	264	757	490	362	238	669	434	321	211	613	398	295	194	552	360	266	176	
C	375	244	181	119	336	219	163	107	297	194	144	95	273	179	133	88	246	162	120	80	
D	263	173	128	85	237	155	116	77	210	138	103	68	193	127	95	63	174	115	86	57	

Angle		10° < α ≤ 15°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1215	864	646	420	1040	719	528	345	958	647	476	311	913	609	449	294	858	564	416	273
B1	832	550	406	266	696	450	333	219	626	406	301	198	589	383	284	187	545	355	263	174
B2	764	496	366	241	626	406	301	198	564	367	272	179	530	346	257	169	491	321	238	157
C	340	222	165	109	279	182	135	90	251	165	123	81	237	155	116	77	220	144	107	71
D	240	157	117	77	197	130	97	64	178	117	87	58	168	111	83	55	156	103	77	51

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1116	748	549	358	1116	748	549	358	994	643	473	309	888	572	422	276	775	502	371	243	
B1	724	468	346	227	724	468	346	227	622	404	299	197	553	360	267	176	485	317	235	155	
B2	651	422	313	206	651	422	313	206	560	365	270	178	498	326	242	159	438	286	213	140	
C	289	189	141	93	289	189	141	93	250	164	122	81	223	146	109	72	196	129	96	64	
D	204	134	100	66	204	134	100	66	177	116	87	58	158	104	78	52	139	92	69	45	

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1032	676	496	325	943	606	446	292	829	535	395	259	759	491	363	238	683	444	328	216	
B1	654	424	314	206	586	382	282	186	518	338	250	165	474	310	230	152	429	281	209	138	
B2	588	382	283	186	528	344	255	168	466	305	226	150	428	280	208	138	386	254	189	125	
C	262	172	128	84	236	155	115	76	209	137	102	68	192	126	94	62	174	114	85	57	
D	185	122	91	60	167	110	82	54	148	98	73	48	136	90	67	45	123	82	61	40	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	955	613	451	296	775	502	371	243	697	452	335	220	656	426	315	207	607	395	292	193	
B1	593	386	286	188	485	317	235	155	438	286	213	140	412	270	201	133	382	250	186	123	
B2	534	348	258	170	438	286	213	140	394	258	192	127	372	244	182	120	345	226	169	111	
C	238	156	116	77	196	129	96	64	177	117	87	58	167	110	82	54	155	102	76	51	
D	169	111	83	55	139	92	69	45	126	83	62	41	119	79	59	39	110	73	55	36	

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																		
TC		3																		
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	886	570	421	275	886	570	421	275	760	492	364	239	675	439	325	213	591	385	286	188
B1	552	359	266	175	552	359	266	175	475	310	230	152	424	278	206	136	372	244	182	120
B2	498	325	241	159	498	325	241	159	429	281	209	138	382	250	186	123	336	221	164	109
C	222	146	109	72	222	146	109	72	192	126	94	62	172	113	84	56	151	100	74	49
D	158	104	78	51	158	104	78	51	136	90	67	45	122	81	60	40	107	71	53	35

Angle		20° < α ≤ 25°																			
TC		2.5																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	799	516	381	250	716	464	343	225	631	411	304	200	579	377	280	184	522	341	253	167	
B1	499	326	242	159	449	294	218	144	397	260	194	128	364	239	178	118	330	217	161	106	
B2	450	294	218	144	405	265	197	130	358	235	175	115	329	216	161	106	298	196	146	97	
C	201	133	99	65	181	119	89	59	161	106	79	52	148	98	73	48	134	89	66	44	
D	143	94	70	47	129	85	64	42	114	76	57	38	105	70	52	35	95	63	47	31	

Angle		20° < α ≤ 25°																		
TC		2																		
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	724	469	347	228	591	385	286	188	532	348	258	170	502	328	243	161	464	304	226	149
B1	454	297	220	146	372	244	182	120	336	221	164	109	317	208	155	102	294	194	144	95
B2	410	268	199	132	336	221	164	109	303	200	149	98	286	189	140	93	266	175	130	86
C	183	121	90	60	151	100	74	49	137	90	67	45	129	85	64	42	120	79	59	39
D	130	86	64	43	107	71	53	35	97	64	48	32	92	61	46	30	85	57	42	-

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																		
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	886	570	421	275	886	570	421	275	760	492	364	239	675	439	325	213	591	385	286	188
B1	552	359	266	175	552	359	266	175	475	310	230	152	424	278	206	136	372	244	182	120
B2	498	325	241	159	498	325	241	159	429	281	209	138	382	250	186	123	336	221	164	109
C	222	146	109	72	222	146	109	72	192	126	94	62	172	113	84	56	151	100	74	49
D	158	104	78	51	158	104	78	51	136	90	67	45	122	81	60	40	107	71	53	35

Angle		25° < α < 30°																		
TC	2.5																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	799	516	381	250	716	464	343	225	631	411	304	200	579	377	280	184	522	341	253	167
B1	499	326	242	159	449	294	218	144	397	260	194	128	364	239	178	118	330	217	161	106
B2	450	294	218	144	405	265	197	130	358	235	175	115	329	216	161	106	298	196	146	97
C	201	133	99	65	181	119	89	59	161	106	79	52	148	98	73	48	134	89	66	44
D	143	94	70	47	129	85	64	42	114	76	57	38	105	70	52	35	95	63	47	31

Angle		25° < α < 30°																		
TC	2																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	724	469	347	228	591	385	286	188	532	348	258	170	502	328	243	161	464	304	226	149
B1	454	297	220	146	372	244	182	120	336	221	164	109	317	208	155	102	294	194	144	95
B2	410	268	199	132	336	221	164	109	303	200	149	98	286	189	140	93	266	175	130	86
C	183	121	90	60	151	100	74	49	137	90	67	45	129	85	64	42	120	79	59	39
D	130	86	64	43	107	71	53	35	97	64	48	32	92	61	46	30	85	57	42	-

PV-ezRack SolarRoof Interface spacing table for **STRATCO TOPDECK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$\alpha = 30^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	711	461	341	224	711	461	341	224	612	398	295	195	544	355	264	173	478	312	232	153
B1	446	291	217	143	446	291	217	143	385	252	188	124	343	226	168	111	302	198	148	98
B2	402	263	196	130	402	263	196	130	347	228	170	112	310	204	152	101	273	179	134	89
C	180	119	89	59	180	119	89	59	156	103	77	51	140	92	69	46	123	81	61	40
D	128	85	63	42	128	85	63	42	111	74	55	36	99	66	49	33	88	58	43	-

Angle		$\alpha = 30^\circ$																			
TC	2.5																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	643	417	309	203	576	376	279	184	509	332	247	163	468	306	227	150	422	277	206	136	
B1	404	265	197	130	363	238	178	118	322	211	158	104	295	194	145	96	267	176	131	87	
B2	364	239	178	118	328	215	161	106	290	191	142	94	267	176	131	87	242	159	119	78	
C	164	108	80	53	147	97	73	48	131	86	65	43	120	80	59	39	109	72	54	36	
D	116	77	58	38	105	69	52	35	93	62	46	31	86	57	43	-	78	52	39	-	

Angle	$\alpha = 30^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	583	380	281	185	478	312	232	153	431	282	210	139	406	266	198	131	377	247	184	122
B1	367	241	179	118	302	198	148	98	273	179	134	89	258	170	126	84	238	158	118	78
B2	332	218	162	107	273	179	134	89	246	162	121	80	233	154	114	76	216	142	106	70
C	149	98	73	49	123	81	61	40	111	74	55	37	105	69	52	35	97	65	48	32
D	106	70	53	35	88	58	43	-	79	53	39	-	75	-	-	-	70	-	-	-

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1319	1734	1566	1476	1183
B1	1630	1470	1386	1106	1630	1470	1386	1106	1574	1416	1334	977	1532	1374	1269	885	1483	1327	1138	790
B2	1591	1433	1350	1014	1591	1433	1350	1014	1536	1379	1282	894	1494	1338	1166	810	1446	1291	1044	722
C	916	820	685	474	916	820	685	474	883	780	604	417	857	709	547	376	827	635	489	335
D	837	658	508	348	837	658	508	348	804	581	446	305	756	526	403	275	678	470	359	244

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	2.5																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1382	1760	1590	1501	1249	1726	1557	1468	1162	1686	1517	1429	1067
B1	1592	1434	1350	1018	1553	1395	1313	929	1507	1350	1202	835	1475	1320	1119	776	1438	1284	1026	710
B2	1554	1396	1314	932	1514	1358	1222	850	1469	1314	1102	764	1438	1284	1026	709	1400	1214	941	648
C	894	798	630	435	869	743	575	396	842	670	517	355	823	624	480	329	800	572	439	300
D	815	605	466	319	792	552	424	289	715	497	380	259	666	461	352	240	611	422	322	218

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1644	1554	1396	1734	1566	1476	1183	1693	1525	1437	1085	1670	1502	1414	1031	1640	1472	1384	966
B1	1557	1399	1317	938	1483	1327	1138	790	1446	1291	1044	722	1423	1270	993	686	1395	1202	930	641
B2	1519	1362	1234	858	1446	1291	1044	722	1407	1235	957	659	1386	1175	910	626	1358	1102	851	585
C	872	750	581	400	827	635	489	335	805	581	447	305	792	552	424	289	744	517	396	270
D	794	558	428	293	678	470	359	244	621	429	328	222	591	407	311	211	553	380	290	196

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1601	1435	1273	823	1601	1435	1273	823	1543	1379	1094	711	1498	1319	972	633	1448	1160	853	557
B1	1360	1083	796	520	1360	1083	796	520	1307	932	686	450	1266	830	612	402	1123	727	538	354
B2	1323	975	718	470	1323	975	718	470	1271	840	620	406	1155	748	553	363	1010	656	486	320
C	669	434	321	211	669	434	321	211	576	375	278	183	512	334	248	164	449	294	219	144
D	469	307	228	151	469	307	228	151	405	266	198	131	361	237	177	117	318	209	156	103

Angle		10° < α ≤ 15°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1397	1149	745	1520	1357	1030	670	1472	1240	910	593	1440	1136	835	545	1401	1023	753	493	
B1	1324	978	720	471	1286	878	648	425	1200	776	573	376	1099	712	526	346	990	643	476	314	
B2	1288	882	650	426	1222	792	585	384	1079	700	518	340	989	642	476	314	891	581	430	284	
C	605	393	291	192	543	354	262	173	479	313	233	154	440	288	214	142	398	261	194	128	
D	425	278	207	137	382	251	187	123	338	222	166	110	311	205	153	101	281	185	138	92	

Angle		10° < α ≤ 15°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1043	677	1448	1160	853	557	1408	1045	768	503	1386	983	724	474	1357	910	671	440	
B1	1290	889	655	430	1123	727	538	354	1010	656	486	320	950	618	458	302	879	573	425	280	
B2	1234	801	591	388	1010	656	486	320	910	592	439	290	857	558	414	273	793	518	384	254	
C	549	358	265	175	449	294	219	144	405	266	198	131	382	251	187	123	354	233	173	115	
D	387	254	189	125	318	209	156	103	287	189	141	93	271	178	133	88	251	166	124	82	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	15° < α ≤ 20°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1482	1207	886	578	1482	1207	886	578	1425	1038	764	500	1374	923	681	446	1251	809	598	393
B1	1168	756	558	367	1168	756	558	367	1004	652	483	318	893	582	431	284	782	511	379	250
B2	1050	682	505	332	1050	682	505	332	904	589	437	287	805	526	390	257	706	462	343	226
C	467	305	227	150	467	305	227	150	403	264	197	130	359	236	176	116	316	208	155	103
D	330	217	162	107	330	217	162	107	285	188	140	93	255	168	125	83	224	148	111	73

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1090	802	524	1401	978	721	472	1337	864	638	418	1224	792	586	385	1102	716	530	349	
B1	1054	684	506	333	946	615	456	300	834	545	404	266	766	501	372	246	692	453	337	222	
B2	949	618	458	302	852	556	412	272	753	492	366	241	691	453	336	222	624	410	305	202	
C	423	277	206	136	380	250	186	123	337	221	165	109	309	204	152	101	280	185	138	91	
D	299	197	147	97	269	178	132	88	239	158	118	78	220	145	108	72	199	132	98	65	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1407	989	728	477	1251	809	598	393	1125	730	540	355	1059	688	509	335	979	638	473	311	
B1	957	622	461	304	782	511	379	250	706	462	343	226	665	436	324	214	616	404	301	198	
B2	862	562	417	274	706	462	343	226	637	418	310	206	600	394	293	194	556	366	272	180	
C	385	252	188	124	316	208	155	103	286	188	140	93	269	178	132	88	250	165	123	82	
D	272	180	134	89	224	148	111	73	203	134	100	67	192	127	95	63	178	118	88	58	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	20° < α ≤ 25°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	921	679	445	1372	921	679	445	1227	794	587	385	1090	707	524	344	954	621	461	303
B1	890	580	430	283	890	580	430	283	767	502	373	246	684	448	333	220	600	394	293	194
B2	802	524	389	257	802	524	389	257	692	454	337	222	617	405	301	199	542	356	266	175
C	359	236	175	116	359	236	175	116	310	204	152	101	277	182	136	90	244	161	120	80
D	254	168	125	83	254	168	125	83	220	145	109	72	197	130	97	65	173	115	86	57

Angle		20° < α ≤ 25°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1289	833	615	404	1155	749	553	364	1018	662	490	323	933	609	451	298	842	550	408	269	
B1	806	526	390	258	724	474	352	232	640	419	312	206	588	386	287	190	531	350	260	172	
B2	726	475	353	233	653	428	318	210	578	379	282	186	531	349	260	172	480	316	235	156	
C	325	214	159	105	293	193	144	95	259	171	128	85	239	158	118	78	216	143	107	71	
D	231	152	114	75	208	137	103	68	185	122	91	61	170	112	84	56	154	102	76	51	

Angle		20° < α ≤ 25°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1169	757	560	368	954	621	461	303	859	561	417	275	809	529	393	259	750	490	365	241	
B1	732	479	356	235	600	394	293	194	542	356	266	175	511	336	250	166	474	312	233	154	
B2	661	433	322	213	542	356	266	175	490	322	240	159	462	304	226	150	429	282	210	139	
C	296	195	145	96	244	161	120	80	220	146	109	72	208	137	103	68	193	128	95	63	
D	210	139	104	69	173	115	86	57	157	104	78	52	148	98	73	49	138	91	68	45	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1372	921	679	445	1372	921	679	445	1227	794	587	385	1090	707	524	344	954	621	461	303
B1	890	580	430	283	890	580	430	283	767	502	373	246	684	448	333	220	600	394	293	194
B2	802	524	389	257	802	524	389	257	692	454	337	222	617	405	301	199	542	356	266	175
C	359	236	175	116	359	236	175	116	310	204	152	101	277	182	136	90	244	161	120	80
D	254	168	125	83	254	168	125	83	220	145	109	72	197	130	97	65	173	115	86	57

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1289	833	615	404	1155	749	553	364	1018	662	490	323	933	609	451	298	842	550	408	269	
B1	806	526	390	258	724	474	352	232	640	419	312	206	588	386	287	190	531	350	260	172	
B2	726	475	353	233	653	428	318	210	578	379	282	186	531	349	260	172	480	316	235	156	
C	325	214	159	105	293	193	144	95	259	171	128	85	239	158	118	78	216	143	107	71	
D	231	152	114	75	208	137	103	68	185	122	91	61	170	112	84	56	154	102	76	51	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1169	757	560	368	954	621	461	303	859	561	417	275	809	529	393	259	750	490	365	241	
B1	732	479	356	235	600	394	293	194	542	356	266	175	511	336	250	166	474	312	233	154	
B2	661	433	322	213	542	356	266	175	490	322	240	159	462	304	226	150	429	282	210	139	
C	296	195	145	96	244	161	120	80	220	146	109	72	208	137	103	68	193	128	95	63	
D	210	139	104	69	173	115	86	57	157	104	78	52	148	98	73	49	138	91	68	45	

PV-ezRack SolarRoof Interface spacing table for **LYSAGHT LONGLINE 305 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC		3																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1148	744	551	362	1148	744	551	362	988	643	476	314	878	573	425	281	770	504	374	247	
B1	719	470	350	231	719	470	350	231	621	407	303	200	554	364	271	179	487	321	238	158	
B2	649	426	316	209	649	426	316	209	561	368	274	182	501	330	246	162	440	290	216	143	
C	291	192	143	95	291	192	143	95	252	166	124	82	225	149	111	74	198	131	98	65	
D	207	137	102	68	207	137	102	68	179	119	89	59	160	106	79	53	141	94	70	47	

Angle		$\alpha = 30^\circ$																			
TC		2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1037	674	499	329	931	606	450	297	822	537	399	263	754	494	367	242	682	446	332	219	
B1	651	427	318	210	586	385	286	190	519	341	254	168	477	314	234	155	431	285	212	141	
B2	588	386	287	190	530	348	259	171	469	309	230	152	431	284	212	140	390	258	192	127	
C	264	174	130	86	238	157	117	78	211	139	104	69	194	128	96	64	176	116	87	58	
D	188	124	93	62	169	112	84	56	150	100	74	49	138	92	69	46	126	83	62	41	

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	942	614	455	300	770	504	374	247	695	456	338	224	655	430	320	212	607	399	297	196	
B1	593	389	290	191	487	321	238	158	440	290	216	143	415	274	204	135	385	254	190	126	
B2	535	352	262	174	440	290	216	143	398	262	196	130	375	248	185	122	348	230	172	114	
C	241	159	119	79	198	131	98	65	179	119	89	59	169	112	84	56	157	104	78	52	
D	171	113	85	56	141	94	70	47	128	85	63	42	121	80	60	40	112	74	56	37	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1220	1532	1374	1293	1181	1483	1327	1247	1138
B2	1591	1433	1350	1235	1591	1433	1350	1235	1536	1379	1297	1186	1494	1338	1257	1147	1446	1291	1212	1106
C	916	820	770	702	916	820	770	702	883	787	739	673	857	763	715	651	827	735	689	587
D	837	744	697	610	837	744	697	610	804	714	668	535	779	691	646	482	751	665	622	428

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1307
B1	1592	1434	1350	1236	1553	1395	1313	1200	1507	1350	1270	1159	1475	1320	1240	1131	1438	1284	1206	1099
B2	1554	1396	1314	1202	1514	1358	1277	1166	1469	1314	1234	1126	1438	1284	1205	1098	1400	1248	1171	1066
C	894	798	749	683	869	775	727	662	842	749	702	622	823	731	684	576	800	710	665	526
D	815	724	678	558	792	702	657	507	765	677	634	454	747	661	618	420	726	641	564	383

Angle		0° < α ≤ 10°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1427	1734	1566	1476	1352	1693	1525	1437	1315	1670	1502	1414	1294	1640	1472	1386	1266	
B1	1557	1399	1317	1204	1483	1327	1247	1138	1446	1291	1212	1106	1423	1270	1192	1086	1395	1244	1166	1062	
B2	1519	1362	1281	1170	1446	1291	1212	1106	1407	1255	1178	1073	1386	1234	1158	1054	1358	1209	1133	1024	
C	872	777	729	664	827	735	689	587	805	714	668	535	792	702	657	507	775	687	642	473	
D	794	704	659	513	751	665	622	428	730	645	574	390	718	634	544	369	702	620	508	344	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1601	1435	1348	1209	1601	1435	1348	1209	1543	1379	1285	1153	1498	1336	1238	1110	1448	1280	1185	975
B1	1360	1202	1112	911	1360	1202	1112	911	1307	1143	1058	788	1266	1099	1018	704	1216	1052	942	619
B2	1323	1160	1074	823	1323	1160	1074	823	1271	1104	1023	712	1228	1062	969	637	1174	1017	851	561
C	748	648	563	370	748	648	563	370	712	617	487	321	684	586	435	287	655	515	383	253
D	665	538	399	264	665	538	399	264	633	465	346	229	609	416	310	205	556	366	273	181

Angle		10° < α ≤ 15°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1397	1305	1171	1520	1357	1261	1132	1472	1309	1211	1040	1440	1271	1176	955	1401	1227	1137	864	
B1	1324	1162	1076	826	1286	1121	1038	744	1243	1075	997	660	1207	1045	923	607	1166	1010	835	550	
B2	1288	1122	1039	746	1250	1082	1003	673	1200	1038	907	597	1166	1010	834	549	1126	976	754	498	
C	723	627	510	336	698	605	460	303	669	549	408	269	651	505	375	248	629	457	340	225	
D	643	488	363	240	621	439	327	216	593	390	290	192	545	359	267	177	493	325	242	161	

Angle		10° < α ≤ 15°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1266	1136	1448	1280	1185	975	1408	1236	1145	881	1386	1211	1122	831	1357	1181	1094	771	
B1	1290	1125	1042	753	1216	1052	942	619	1174	1017	851	561	1150	997	803	529	1121	972	745	491	
B2	1254	1086	1007	681	1174	1017	851	561	1134	982	770	507	1111	963	726	478	1082	907	674	445	
C	700	607	465	307	655	515	383	253	633	466	346	229	621	439	327	216	605	408	304	201	
D	623	444	331	219	556	366	273	181	503	331	247	164	474	313	233	155	440	290	217	144	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	15° < α ≤ 20°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1482	1297	1200	1012	1482	1297	1200	1012	1425	1233	1142	876	1374	1186	1099	782	1312	1136	1048	689
B1	1232	1066	978	643	1232	1066	978	643	1171	1014	846	557	1126	977	756	498	1078	896	665	439
B2	1190	1030	884	582	1190	1030	884	582	1131	981	765	504	1088	921	683	451	1042	810	602	398
C	664	535	397	263	664	535	397	263	632	463	344	228	608	414	308	204	554	364	271	180
D	578	380	283	187	578	380	283	187	500	329	246	163	446	294	220	146	393	260	194	129

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1254	1161	918	1401	1210	1120	827	1342	1160	1075	733	1303	1127	1027	675	1259	1090	928	611	
B1	1191	1031	887	584	1149	995	799	526	1102	954	708	467	1070	878	652	430	1034	794	590	390	
B2	1150	996	802	528	1109	962	722	476	1064	862	641	423	1034	793	590	390	1000	718	534	353	
C	642	485	361	239	620	437	325	215	590	388	289	191	542	357	266	176	491	323	241	160	
D	524	345	257	170	472	311	232	154	418	276	206	137	385	254	190	126	349	231	172	114	

Angle		15° < α ≤ 20°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1407	1214	1125	836	1312	1136	1048	689	1267	1097	947	623	1242	1075	893	588	1210	1048	828	546
B1	1153	999	808	532	1078	896	665	439	1042	810	602	398	1022	764	568	375	995	708	527	349
B2	1114	966	730	482	1042	810	602	398	1006	732	544	360	987	690	514	340	962	641	477	316
C	622	442	329	218	554	364	271	180	500	330	246	163	472	311	232	154	438	289	216	143
D	477	315	235	156	393	260	194	129	356	235	176	117	336	222	166	110	312	206	154	102

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	1098	780	1372	1185	1098	780	1304	1128	1029	676	1254	1085	918	604	1199	1040	808	532	
B1	1126	976	754	497	1126	976	754	497	1071	879	653	431	1030	785	583	386	987	690	514	340	
B2	1087	918	682	450	1087	918	682	450	1035	794	590	390	996	710	528	349	950	625	465	308	
C	608	413	307	203	608	413	307	203	543	358	266	177	485	320	238	158	427	282	210	139	
D	445	294	219	145	445	294	219	145	386	255	190	126	345	228	170	113	304	201	150	100	

Angle		20° < α ≤ 25°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1326	1146	1063	708	1278	1106	971	638	1226	1062	859	566	1191	1032	791	521	1150	964	716	473
B1	1089	922	684	451	1050	830	617	407	1008	735	547	362	980	677	503	333	931	613	456	302
B2	1052	833	618	409	1015	750	558	369	974	665	495	327	930	612	456	302	842	554	413	274
C	569	375	279	185	513	338	252	167	454	300	224	148	418	276	206	137	379	250	187	124
D	404	267	199	132	364	241	180	119	323	214	160	106	298	197	147	98	270	179	134	89

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1284	1110	982	645	1199	1040	808	532	1159	983	730	481	1136	927	689	455	1107	860	639	422	
B1	1054	839	623	412	987	690	514	340	950	625	465	308	896	590	439	290	831	547	408	270	
B2	1019	758	564	373	950	625	465	308	858	565	421	278	810	534	398	263	751	495	369	245	
C	519	342	255	169	427	282	210	139	386	255	190	126	364	241	180	119	338	224	167	111	
D	368	244	182	121	304	201	150	100	275	182	136	90	260	172	129	85	241	160	120	79	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	1098	780	1372	1185	1098	780	1304	1128	1029	676	1254	1085	918	604	1199	1040	808	532	
B1	1126	976	754	497	1126	976	754	497	1071	879	653	431	1030	785	583	386	987	690	514	340	
B2	1087	918	682	450	1087	918	682	450	1035	794	590	390	996	710	528	349	950	625	465	308	
C	608	413	307	203	608	413	307	203	543	358	266	177	485	320	238	158	427	282	210	139	
D	445	294	219	145	445	294	219	145	386	255	190	126	345	228	170	113	304	201	150	100	

Angle		25° < α < 30°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1326	1146	1063	708	1278	1106	971	638	1226	1062	859	566	1191	1032	791	521	1150	964	716	473
B1	1089	922	684	451	1050	830	617	407	1008	735	547	362	980	677	503	333	931	613	456	302
B2	1052	833	618	409	1015	750	558	369	974	665	495	327	930	612	456	302	842	554	413	274
C	569	375	279	185	513	338	252	167	454	300	224	148	418	276	206	137	379	250	187	124
D	404	267	199	132	364	241	180	119	323	214	160	106	298	197	147	98	270	179	134	89

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1284	1110	982	645	1199	1040	808	532	1159	983	730	481	1136	927	689	455	1107	860	639	422	
B1	1054	839	623	412	987	690	514	340	950	625	465	308	896	590	439	290	831	547	408	270	
B2	1019	758	564	373	950	625	465	308	858	565	421	278	810	534	398	263	751	495	369	245	
C	519	342	255	169	427	282	210	139	386	255	190	126	364	241	180	119	338	224	167	111	
D	368	244	182	121	304	201	150	100	275	182	136	90	260	172	129	85	241	160	120	79	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC	3																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1276	1104	965	635	1276	1104	965	635	1213	1051	835	550	1167	1005	745	492	1117	883	656	434	
B1	1048	825	613	405	1048	825	613	405	998	714	531	351	961	638	475	314	854	562	418	278	
B2	1013	746	554	366	1013	746	554	366	965	646	481	318	877	577	430	285	771	508	379	251	
C	510	336	250	166	510	336	250	166	441	291	217	144	394	260	194	129	347	230	172	114	
D	362	239	179	119	362	239	179	119	314	208	155	103	281	186	139	92	248	164	123	82	

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1233	1068	875	576	1189	1031	788	519	1141	941	699	462	1109	865	643	425	1072	783	582	385
B1	1014	748	557	368	979	674	502	332	910	598	446	295	836	550	410	272	757	498	372	246
B2	980	677	504	333	928	610	454	301	822	541	403	267	756	498	371	246	684	451	337	223
C	463	305	228	151	417	275	205	136	370	244	182	121	340	225	168	112	308	204	152	101
D	329	218	163	108	297	196	147	98	263	175	130	87	243	161	120	80	220	146	109	73

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1194	1035	797	525	1117	883	656	434	1080	798	594	393	1058	753	560	371	1032	699	520	344	
B1	983	682	507	336	854	562	418	278	771	508	379	251	728	480	358	238	675	446	333	220	
B2	938	617	459	304	771	508	379	251	698	460	343	227	658	434	324	215	610	403	301	200	
C	422	278	208	138	347	230	172	114	314	208	155	103	297	196	147	98	275	182	136	91	
D	300	199	148	99	248	164	123	82	224	149	111	74	212	140	105	70	197	130	98	65	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1410	1887	1720	1629	1410	1830	1663	1572	1252	1785	1617	1527	1139	1734	1566	1449	1022
B1	1630	1470	1355	955	1630	1470	1355	955	1574	1416	1204	843	1532	1374	1096	764	1483	1262	983	682
B2	1591	1433	1248	876	1591	1433	1248	876	1536	1379	1107	772	1494	1290	1006	699	1446	1161	902	623
C	916	760	591	410	916	760	591	410	883	673	522	360	857	612	473	325	781	548	422	289
D	809	569	438	301	809	569	438	301	718	502	386	264	653	454	348	237	586	406	310	211

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1849	1681	1590	1301	1808	1640	1549	1193	1760	1590	1501	1078	1726	1557	1425	1004	1686	1517	1313	921	
B1	1592	1434	1252	878	1553	1395	1148	802	1507	1328	1038	722	1475	1241	966	670	1438	1142	886	613	
B2	1554	1396	1151	805	1514	1350	1055	734	1469	1223	952	660	1438	1141	886	612	1400	1049	812	559	
C	894	701	544	376	869	642	497	342	823	579	446	306	768	539	415	284	707	494	379	259	
D	747	523	402	275	684	477	366	250	618	429	328	224	575	398	304	207	528	364	278	189	

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1205	1734	1566	1449	1022	1693	1525	1335	937	1670	1502	1272	891	1640	1472	1195	834	
B1	1557	1399	1159	810	1483	1262	983	682	1446	1161	902	623	1423	1106	858	592	1395	1038	803	553	
B2	1519	1362	1065	742	1446	1161	902	623	1407	1066	826	570	1386	1015	786	540	1351	952	735	505	
C	872	648	501	345	781	548	422	289	719	502	386	264	684	477	366	250	642	447	342	233	
D	691	482	370	253	586	406	310	211	537	371	283	192	510	352	268	182	478	328	250	170	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1410	1100	711	1601	1410	1100	711	1543	1252	944	614	1498	1139	840	547	1448	1002	736	480	
B1	1355	936	687	449	1355	936	687	449	1204	805	593	388	1096	716	529	346	970	628	464	305	
B2	1248	842	620	406	1248	842	620	406	1107	726	535	351	998	646	478	314	873	566	419	276	
C	578	375	277	183	578	375	277	183	497	324	240	158	442	289	214	141	388	254	189	125	
D	405	265	197	130	405	265	197	130	350	229	171	113	312	205	153	101	274	180	134	89	

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1410	1100	711	1601	1410	1100	711	1543	1252	944	614	1498	1139	840	547	1448	1002	736	480	
B1	1355	936	687	449	1355	936	687	449	1204	805	593	388	1096	716	529	346	970	628	464	305	
B2	1248	842	620	406	1248	842	620	406	1107	726	535	351	998	646	478	314	873	566	419	276	
C	578	375	277	183	578	375	277	183	497	324	240	158	442	289	214	141	388	254	189	125	
D	405	265	197	130	405	265	197	130	350	229	171	113	312	205	153	101	274	180	134	89	

Angle		10° < α ≤ 15°																			
TC		2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1205	900	586	1448	1002	736	480	1335	902	664	434	1272	849	626	410	1195	785	580	380	
B1	1159	767	566	370	970	628	464	305	873	566	419	276	821	534	396	261	759	495	367	242	
B2	1065	692	510	335	873	566	419	276	786	511	379	250	740	482	358	236	685	447	332	219	
C	474	309	229	151	388	254	189	125	350	230	171	113	330	217	161	107	306	201	150	99	
D	334	219	163	108	274	180	134	89	248	163	122	81	234	154	115	76	217	143	107	71	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1042	765	499	1482	1042	765	499	1384	896	660	432	1238	797	588	385	1080	699	517	339	
B1	1009	653	482	317	1009	653	482	317	867	563	417	274	771	502	372	246	676	442	328	216	
B2	907	589	436	286	907	589	436	286	781	509	377	248	694	454	337	222	610	399	296	196	
C	403	264	196	129	403	264	196	129	348	228	170	112	310	204	152	100	273	180	134	89	
D	285	187	140	92	285	187	140	92	246	162	121	80	220	145	108	72	194	128	96	63	

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1438	941	692	452	1314	845	622	407	1155	745	550	361	1057	684	506	332	952	618	457	301	
B1	910	591	437	287	817	531	394	259	721	470	349	230	662	432	321	212	598	391	290	192	
B2	820	533	395	260	736	480	356	234	650	425	315	208	597	390	290	192	539	354	263	174	
C	365	239	178	118	328	216	160	106	291	191	142	94	267	176	131	87	242	159	119	79	
D	258	170	127	84	233	153	114	76	206	136	102	67	190	125	94	62	172	114	85	56	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1330	854	629	412	1080	699	517	339	972	631	467	307	915	594	440	290	846	551	408	269	
B1	826	538	398	262	676	442	328	216	610	399	296	196	574	376	280	185	532	349	259	171	
B2	745	486	360	238	610	399	296	196	550	361	268	177	518	340	253	167	480	315	235	155	
C	332	218	162	107	273	180	134	89	247	162	121	80	233	153	114	76	216	142	106	70	
D	235	155	116	77	194	128	96	63	175	116	87	57	165	109	82	54	154	102	76	50	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	20° < α ≤ 25°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1234	795	587	384	1234	795	587	384	1059	685	507	333	941	611	452	298	824	536	398	262
B1	769	501	371	245	769	501	371	245	662	433	322	212	590	386	287	190	518	340	253	167
B2	693	453	336	222	693	453	336	222	598	391	291	192	533	350	260	172	468	308	229	151
C	310	203	151	100	310	203	151	100	268	176	131	87	239	158	118	78	210	139	104	69
D	219	145	108	72	219	145	108	72	190	126	94	62	170	112	84	56	150	99	74	49

Angle		20° < α ≤ 25°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1114	719	531	349	997	647	479	315	879	572	423	279	806	525	389	257	728	475	353	233
B1	695	454	337	222	625	409	304	201	553	362	270	178	508	334	248	164	459	302	225	149
B2	627	410	305	201	564	370	274	182	499	327	244	162	458	302	225	149	414	273	203	134
C	281	185	138	91	253	167	124	82	224	148	110	73	206	136	102	67	187	123	92	61
D	199	132	98	65	180	119	89	59	159	105	79	52	147	97	73	48	133	88	66	44

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1009	654	484	318	824	536	398	262	742	485	360	237	699	456	339	224	647	423	315	208	
B1	632	414	307	202	518	340	253	167	468	308	229	151	442	290	216	143	410	270	201	133	
B2	570	374	278	183	468	308	229	151	423	278	207	138	399	262	196	130	370	244	182	120	
C	256	168	126	83	210	139	104	69	190	126	94	62	180	119	89	59	167	110	82	55	
D	182	120	90	60	150	99	74	49	136	90	67	45	128	85	63	42	119	79	59	39	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1234	795	587	384	1234	795	587	384	1059	685	507	333	941	611	452	298	824	536	398	262
B1	769	501	371	245	769	501	371	245	662	433	322	212	590	386	287	190	518	340	253	167
B2	693	453	336	222	693	453	336	222	598	391	291	192	533	350	260	172	468	308	229	151
C	310	203	151	100	310	203	151	100	268	176	131	87	239	158	118	78	210	139	104	69
D	219	145	108	72	219	145	108	72	190	126	94	62	170	112	84	56	150	99	74	49

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1114	719	531	349	997	647	479	315	879	572	423	279	806	525	389	257	728	475	353	233	
B1	695	454	337	222	625	409	304	201	553	362	270	178	508	334	248	164	459	302	225	149	
B2	627	410	305	201	564	370	274	182	499	327	244	162	458	302	225	149	414	273	203	134	
C	281	185	138	91	253	167	124	82	224	148	110	73	206	136	102	67	187	123	92	61	
D	199	132	98	65	180	119	89	59	159	105	79	52	147	97	73	48	133	88	66	44	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1009	654	484	318	824	536	398	262	742	485	360	237	699	456	339	224	647	423	315	208	
B1	632	414	307	202	518	340	253	167	468	308	229	151	442	290	216	143	410	270	201	133	
B2	570	374	278	183	468	308	229	151	423	278	207	138	399	262	196	130	370	244	182	120	
C	256	168	126	83	210	139	104	69	190	126	94	62	180	119	89	59	167	110	82	55	
D	182	120	90	60	150	99	74	49	136	90	67	45	128	85	63	42	119	79	59	39	

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$\alpha = 30^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	991	643	475	313	991	643	475	313	853	555	411	271	758	495	367	242	666	435	323	213
B1	622	406	302	199	622	406	302	199	536	352	262	173	478	314	234	154	421	277	206	137
B2	561	367	273	181	561	367	273	181	484	318	237	157	432	284	212	140	380	250	186	123
C	251	166	123	82	251	166	123	82	218	144	107	71	194	128	96	64	171	113	85	56
D	179	118	88	59	179	118	88	59	155	102	77	51	138	92	69	46	122	81	60	40

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	895	582	431	284	803	524	388	256	710	463	344	227	651	427	317	209	588	386	286	190
B1	562	369	274	181	506	332	247	163	448	294	219	145	412	271	202	134	373	246	183	122
B2	508	334	248	164	457	301	224	148	405	266	198	131	372	246	183	121	337	222	166	110
C	228	150	112	74	205	136	101	67	182	120	90	60	168	111	83	55	152	101	75	50
D	162	107	80	53	146	97	72	48	130	86	64	43	120	79	59	39	108	72	54	36

Angle	$\alpha = 30^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	813	530	393	258	666	435	323	213	600	394	292	193	566	371	276	183	524	344	256	169
B1	512	336	250	166	421	277	206	137	380	250	186	123	358	236	176	117	333	219	164	109
B2	462	304	226	150	380	250	186	123	343	226	169	112	324	214	159	106	301	198	148	98
C	208	137	102	68	171	113	85	56	155	103	77	51	146	97	72	48	136	90	67	45
D	148	98	73	49	122	81	60	40	111	73	55	36	104	69	52	34	97	64	48	32

PV-ezRack SolarRoof Interface spacing table for **REV-KLIP 700**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1477	1887	1720	1629	1477	1830	1663	1572	1312	1785	1617	1527	1193	1734	1566	1476	1070
B1	1630	1470	1386	1001	1630	1470	1386	1001	1574	1416	1262	884	1532	1374	1148	801	1483	1322	1030	715
B2	1591	1433	1308	918	1591	1433	1308	918	1536	1379	1160	809	1494	1338	1054	732	1446	1216	945	654
C	916	796	620	429	916	796	620	429	883	706	547	377	857	641	495	341	819	574	442	303
D	837	596	459	315	837	596	459	315	752	526	404	276	684	476	365	249	614	425	325	221

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1849	1681	1590	1364	1808	1640	1549	1250	1760	1590	1501	1130	1726	1557	1468	1051	1686	1517	1376	965	
B1	1592	1434	1312	921	1553	1395	1203	841	1507	1350	1087	756	1475	1300	1013	702	1438	1197	929	642	
B2	1554	1396	1206	843	1514	1358	1106	770	1469	1282	998	691	1438	1195	928	642	1400	1099	851	586	
C	894	734	570	394	869	672	520	358	842	606	468	321	805	564	434	298	741	517	397	271	
D	782	548	421	288	717	500	384	262	647	449	344	234	603	417	319	217	553	381	291	198	

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1262	1734	1566	1476	1070	1693	1525	1398	982	1670	1502	1333	933	1640	1472	1252	874	
B1	1557	1399	1214	849	1483	1322	1030	715	1446	1216	945	654	1423	1158	898	620	1395	1087	842	579	
B2	1519	1362	1116	777	1446	1216	945	654	1407	1118	866	597	1386	1064	823	566	1358	998	770	529	
C	872	679	525	362	819	574	442	303	753	526	404	276	717	500	384	262	673	468	359	244	
D	724	505	388	265	614	425	325	221	562	388	296	201	535	368	281	191	500	344	262	178	

PV-ezRack SolarRoof Interface spacing table for REV-KLIP 700 (cont)

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC		3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1435	1152	745	1601	1435	1152	745	1543	1312	990	643	1498	1193	880	573	1448	1051	771	503	
B1	1360	981	720	470	1360	981	720	470	1262	843	622	407	1148	750	554	363	1016	658	486	320	
B2	1308	882	650	425	1308	882	650	425	1160	760	561	368	1046	677	500	329	914	594	440	290	
C	606	393	291	191	606	393	291	191	521	339	252	166	464	303	225	148	407	266	198	131	
D	425	278	206	136	425	278	206	136	367	240	179	118	327	215	160	106	287	189	141	93	

Angle		10° < α ≤ 15°																		
TC		2.5																		
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1561	1364	1040	674	1520	1250	932	606	1472	1122	823	536	1440	1028	755	493	1376	926	682	446
B1	1312	886	652	426	1203	795	586	384	1086	702	518	341	994	645	477	314	896	582	431	284
B2	1206	798	588	386	1106	717	529	347	977	633	468	308	894	582	430	283	806	526	390	257
C	547	356	264	174	491	320	238	157	434	284	211	139	398	261	194	128	360	236	176	116
D	385	252	187	124	346	227	169	112	306	201	150	99	281	185	138	91	255	168	125	83

Angle		10° < α ≤ 15°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1525	1262	944	614	1448	1051	771	503	1398	945	695	455	1333	890	655	429	1252	823	607	398
B1	1214	804	593	389	1016	658	486	320	914	594	440	290	860	560	414	273	796	518	385	254
B2	1116	725	535	351	914	594	440	290	823	536	398	262	775	506	375	247	718	469	348	230
C	497	324	240	158	407	266	198	131	367	241	179	118	346	227	169	112	321	211	157	104
D	350	230	171	113	287	189	141	93	260	171	128	85	245	162	120	80	227	150	112	74

PV-ezRack SolarRoof Interface spacing table for **REV-KLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1092	802	523	1482	1092	802	523	1425	939	691	452	1297	836	616	404	1132	733	541	355	
B1	1057	684	506	332	1057	684	506	332	909	590	437	287	808	526	390	257	708	462	343	226	
B2	950	617	457	300	950	617	457	300	818	533	395	260	728	475	353	233	638	418	310	205	
C	423	276	205	136	423	276	205	136	365	239	178	118	325	214	159	105	286	188	140	93	
D	298	196	146	97	298	196	146	97	258	170	127	84	231	152	113	75	203	134	100	66	

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	986	725	474	1377	885	652	427	1210	781	576	378	1108	717	530	349	998	648	479	315	
B1	954	619	458	302	856	557	413	272	755	493	366	241	694	453	336	222	626	410	305	201	
B2	859	558	414	273	771	502	373	246	681	446	330	218	626	410	304	201	565	370	275	182	
C	383	251	186	123	344	226	168	111	305	200	149	99	280	184	137	91	253	167	125	83	
D	271	178	133	88	244	161	120	79	216	143	106	71	199	131	98	65	180	119	89	59	

Angle	15° < α ≤ 20°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1394	895	660	432	1132	733	541	355	1018	660	489	321	958	622	461	303	886	577	428	281
B1	866	563	418	274	708	462	343	226	638	418	310	205	602	394	293	194	558	366	272	180
B2	780	509	377	249	638	418	310	205	576	378	281	186	543	357	265	175	503	330	246	163
C	348	228	170	112	286	188	140	93	258	170	127	84	244	161	120	79	226	149	111	74
D	247	163	121	80	203	134	100	66	184	121	91	60	173	115	86	57	161	106	80	53

PV-ezRack SolarRoof Interface spacing table for **REV-KLIP 700 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	20° < α ≤ 25°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1294	833	615	403	1294	833	615	403	1110	718	531	349	986	640	473	312	863	562	417	275
B1	806	525	389	257	806	525	389	257	694	454	337	222	618	405	301	199	543	357	266	175
B2	726	474	352	232	726	474	352	232	626	410	305	202	558	366	273	180	490	322	240	158
C	324	213	159	105	324	213	159	105	281	185	138	91	250	165	123	82	220	146	109	72
D	230	152	113	75	230	152	113	75	199	132	98	65	178	118	88	58	157	104	78	52

Angle	20° < α ≤ 25°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1166	754	557	366	1045	677	502	330	921	599	444	292	845	551	408	269	762	498	370	244
B1	729	476	353	233	655	429	318	210	579	380	282	186	532	350	260	172	481	316	235	156
B2	657	430	319	211	591	387	288	190	523	343	255	169	481	316	235	156	434	286	213	141
C	294	193	144	95	265	174	130	86	235	155	116	77	216	143	106	71	196	129	96	64
D	209	138	103	68	188	124	93	62	167	110	83	55	154	102	76	51	139	92	69	46

Angle	20° < α ≤ 25°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1057	685	507	333	863	562	417	275	778	507	377	248	733	479	355	235	678	444	330	218
B1	662	434	322	213	543	357	266	175	490	322	240	158	462	304	226	150	429	282	210	139
B2	598	392	291	192	490	322	240	158	443	292	218	144	418	275	205	136	388	255	190	126
C	268	176	132	87	220	146	109	72	199	132	98	65	188	124	93	62	175	116	86	57
D	190	126	94	62	157	104	78	52	142	94	70	47	134	89	66	44	125	83	62	41

PV-ezRack SolarRoof Interface spacing table for **REV-KLIP 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface ER-I-09 and ER-I-34
Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1294	833	615	403	1294	833	615	403	1110	718	531	349	986	640	473	312	863	562	417	275
B1	806	525	389	257	806	525	389	257	694	454	337	222	618	405	301	199	543	357	266	175
B2	726	474	352	232	726	474	352	232	626	410	305	202	558	366	273	180	490	322	240	158
C	324	213	159	105	324	213	159	105	281	185	138	91	250	165	123	82	220	146	109	72
D	230	152	113	75	230	152	113	75	199	132	98	65	178	118	88	58	157	104	78	52

Angle		25° < α < 30°																			
TC		2.5																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1166	754	557	366	1045	677	502	330	921	599	444	292	845	551	408	269	762	498	370	244	
B1	729	476	353	233	655	429	318	210	579	380	282	186	532	350	260	172	481	316	235	156	
B2	657	430	319	211	591	387	288	190	523	343	255	169	481	316	235	156	434	286	213	141	
C	294	193	144	95	265	174	130	86	235	155	116	77	216	143	106	71	196	129	96	64	
D	209	138	103	68	188	124	93	62	167	110	83	55	154	102	76	51	139	92	69	46	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1057	685	507	333	863	562	417	275	778	507	377	248	733	479	355	235	678	444	330	218	
B1	662	434	322	213	543	357	266	175	490	322	240	158	462	304	226	150	429	282	210	139	
B2	598	392	291	192	490	322	240	158	443	292	218	144	418	275	205	136	388	255	190	126	
C	268	176	132	87	220	146	109	72	199	132	98	65	188	124	93	62	175	116	86	57	
D	190	126	94	62	157	104	78	52	142	94	70	47	134	89	66	44	125	83	62	41	

PV-ezRack SolarRoof Interface spacing table for **REV-KLIP 700 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$\alpha = 30^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1039	673	498	327	1039	673	498	327	893	581	431	284	795	519	385	254	697	456	339	224
B1	651	426	317	209	651	426	317	209	562	369	274	182	502	330	245	162	441	290	216	143
B2	587	385	286	189	587	385	286	189	507	334	248	164	453	298	222	147	398	262	195	130
C	263	173	129	86	263	173	129	86	228	150	112	74	204	135	100	67	179	119	89	59
D	187	124	92	61	187	124	92	61	162	107	80	53	145	96	72	48	128	85	63	42

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	938	609	451	298	842	549	407	269	744	486	360	238	683	447	332	219	616	405	301	199
B1	590	386	287	190	530	348	259	171	470	309	230	152	432	284	212	140	390	258	192	127
B2	532	350	260	172	479	315	234	155	424	279	208	138	390	257	192	127	353	233	174	115
C	239	158	118	78	215	142	106	70	191	126	94	63	176	116	87	58	159	105	79	52
D	170	112	84	56	153	101	76	50	136	90	67	45	125	83	62	41	114	75	56	37

Angle		$\alpha = 30^\circ$																		
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	852	555	411	271	697	456	339	224	629	412	307	202	592	388	289	191	549	360	269	178
B1	537	352	262	174	441	290	216	143	398	262	195	130	376	248	185	122	349	230	171	114
B2	485	318	237	157	398	262	195	130	360	238	177	118	340	224	167	111	315	208	155	103
C	218	144	107	71	179	119	89	59	162	107	80	53	153	101	76	50	142	94	70	47
D	155	103	77	51	128	85	63	42	116	77	57	38	109	73	54	36	102	67	50	34

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1664	1340	965	1887	1664	1340	965	1830	1501	1200	857	1785	1381	1098	779	1704	1254	991	699
B1	1595	1173	927	654	1595	1173	927	654	1440	1048	824	577	1326	958	750	522	1204	863	673	466
B2	1486	1085	854	599	1486	1085	854	599	1338	967	758	528	1229	882	689	478	1114	794	617	426
C	727	520	405	280	727	520	405	280	649	461	357	246	593	419	324	222	535	375	289	198
D	553	389	300	206	553	389	300	206	491	343	264	180	447	311	238	162	401	277	212	144

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1553	1244	891	1808	1440	1148	817	1760	1315	1043	738	1680	1234	975	687	1565	1142	898	630
B1	1490	1087	857	601	1382	1002	786	549	1262	909	710	494	1185	849	661	458	1097	781	606	419
B2	1385	1004	788	550	1282	923	722	502	1170	837	651	451	1096	781	606	418	1013	718	556	382
C	674	479	372	257	620	439	340	234	563	396	305	210	526	368	284	194	484	338	259	177
D	511	358	275	188	468	326	251	171	423	293	225	153	394	272	208	142	361	249	190	129

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1452	1158	825	1704	1254	991	699	1587	1159	913	641	1522	1108	870	609	1441	1043	818	570	
B1	1393	1010	793	554	1204	863	673	466	1114	794	617	426	1064	756	586	405	1002	710	550	378	
B2	1293	932	729	507	1114	794	617	426	1029	730	565	390	982	694	537	370	924	651	502	345	
C	626	443	343	236	535	375	289	198	492	344	264	180	468	326	251	171	439	306	234	160	
D	473	330	253	173	401	277	212	144	367	254	194	131	349	241	184	124	327	225	171	116	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1340	965	752	486	1340	965	752	486	1200	857	646	420	1098	779	575	374	991	686	503	329
B1	927	640	470	307	927	640	470	307	824	550	406	266	750	490	362	237	663	430	318	209
B2	854	576	424	278	854	576	424	278	758	496	366	240	682	442	326	214	597	387	287	189
C	395	257	190	125	395	257	190	125	340	222	164	108	303	198	147	97	266	174	129	85
D	277	181	135	89	277	181	135	89	239	157	117	77	213	140	104	69	188	123	92	61

Angle		10° < α ≤ 15°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1244	891	679	440	1148	817	609	396	1043	733	537	350	975	671	493	322	898	604	445	292
B1	857	578	426	278	786	519	382	250	709	458	338	222	649	421	311	205	585	380	282	185
B2	788	521	384	251	722	468	346	226	638	414	306	201	584	379	281	185	526	343	254	167
C	357	232	172	113	321	209	155	102	283	185	138	91	260	170	127	84	235	154	115	76
D	251	165	122	81	226	148	110	73	200	131	98	65	184	121	90	60	166	110	82	54

Angle		$10^{\circ} < \alpha \leq 15^{\circ}$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1158	825	616	400	991	686	503	329	913	617	454	297	870	581	428	280	818	537	396	260	
B1	793	525	387	254	663	430	318	209	597	387	287	189	562	366	270	178	519	338	251	166	
B2	729	473	350	230	597	387	287	189	538	350	259	170	506	330	245	162	468	306	227	150	
C	324	211	157	103	266	174	129	85	240	157	117	77	226	148	110	73	209	138	102	68	
D	228	150	112	74	188	123	92	61	170	112	83	55	160	105	79	52	148	98	73	48	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1064	713	524	342	1064	713	524	342	947	613	451	295	847	546	402	264	740	478	354	232	
B1	690	446	330	217	690	446	330	217	593	386	285	188	527	343	254	168	462	302	224	148	
B2	621	402	298	196	621	402	298	196	534	348	258	170	475	310	230	152	417	273	202	134	
C	276	180	134	89	276	180	134	89	238	156	116	77	212	140	104	69	187	123	92	61	
D	195	128	95	63	195	128	95	63	169	111	83	55	151	99	74	49	133	88	65	43	

Angle		15° < α ≤ 20°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	983	644	473	309	899	578	426	279	791	510	377	247	723	468	346	227	651	422	313	206
B1	623	404	299	197	558	363	270	178	493	322	238	158	453	296	219	145	409	267	198	131
B2	561	365	270	178	503	328	243	161	445	290	216	142	408	267	198	131	369	242	180	118
C	250	164	122	80	225	147	110	73	199	131	97	65	183	120	90	59	165	109	81	54
D	177	116	87	57	159	105	78	52	141	93	70	46	130	86	64	43	118	78	58	39

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	910	585	430	282	740	478	354	232	665	431	319	210	626	406	301	198	578	377	279	184	
B1	566	368	272	179	462	302	224	148	417	273	202	134	393	258	191	126	364	238	178	118	
B2	510	332	246	162	417	273	202	134	376	246	183	121	354	233	173	114	329	216	161	106	
C	227	149	111	73	187	123	92	61	169	111	83	55	159	105	78	52	148	97	73	48	
D	161	106	79	52	133	88	65	43	120	79	59	39	113	75	56	37	105	70	52	35	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	845	544	401	263	845	544	401	263	724	469	347	228	643	417	309	203	564	367	272	179	
B1	526	342	254	167	526	342	254	167	454	296	220	145	404	265	197	130	354	233	173	114	
B2	474	310	230	151	474	310	230	151	409	268	199	131	365	239	178	118	320	210	157	103	
C	212	139	104	69	212	139	104	69	183	121	90	60	164	108	80	53	144	95	71	47	
D	150	99	74	49	150	99	74	49	130	86	64	43	116	77	57	38	102	68	51	34	

Angle		20° < α ≤ 25°																			
TC		2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	762	492	363	239	683	442	327	215	601	391	290	190	552	360	266	176	497	325	241	159	
B1	476	310	230	152	427	280	208	137	378	248	184	122	347	228	170	112	314	206	154	102	
B2	429	281	208	138	386	253	188	124	342	224	166	110	314	206	154	102	284	186	139	92	
C	192	126	94	62	173	114	85	56	153	101	75	50	141	93	69	46	128	84	63	42	
D	136	90	67	45	123	81	61	40	109	72	54	36	100	66	50	33	91	60	45	30	

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	690	447	331	218	564	367	272	179	507	332	246	162	479	313	232	153	443	290	215	142	
B1	433	283	210	138	354	233	173	114	320	210	157	103	302	198	148	98	280	184	138	91	
B2	390	255	190	126	320	210	157	103	290	190	142	94	273	179	134	89	253	166	124	82	
C	175	115	86	57	144	95	71	47	130	86	64	43	123	81	61	40	114	75	56	37	
D	124	82	61	41	102	68	51	34	93	61	46	31	88	58	43	-	81	54	40	-	

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC	3																				
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	845	544	401	263	845	544	401	263	724	469	347	228	643	417	309	203	564	367	272	179	
B1	526	342	254	167	526	342	254	167	454	296	220	145	404	265	197	130	354	233	173	114	
B2	474	310	230	151	474	310	230	151	409	268	199	131	365	239	178	118	320	210	157	103	
C	212	139	104	69	212	139	104	69	183	121	90	60	164	108	80	53	144	95	71	47	
D	150	99	74	49	150	99	74	49	130	86	64	43	116	77	57	38	102	68	51	34	

Angle		25° < α < 30°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	762	492	363	239	683	442	327	215	601	391	290	190	552	360	266	176	497	325	241	159
B1	476	310	230	152	427	280	208	137	378	248	184	122	347	228	170	112	314	206	154	102
B2	429	281	208	138	386	253	188	124	342	224	166	110	314	206	154	102	284	186	139	92
C	192	126	94	62	173	114	85	56	153	101	75	50	141	93	69	46	128	84	63	42
D	136	90	67	45	123	81	61	40	109	72	54	36	100	66	50	33	91	60	45	30

Angle		25° < α < 30°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	690	447	331	218	564	367	272	179	507	332	246	162	479	313	232	153	443	290	215	142
B1	433	283	210	138	354	233	173	114	320	210	157	103	302	198	148	98	280	184	138	91
B2	390	255	190	126	320	210	157	103	290	190	142	94	273	179	134	89	253	166	124	82
C	175	115	86	57	144	95	71	47	130	86	64	43	123	81	61	40	114	75	56	37
D	124	82	61	41	102	68	51	34	93	61	46	31	88	58	43	-	81	54	40	-

PV-ezRack SolarRoof Interface spacing table for **METROLL METLOK 500 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																		
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	678	439	326	213	678	439	326	213	583	380	281	185	519	338	251	166	455	298	221	146
B1	425	278	206	136	425	278	206	136	367	241	179	118	327	215	160	106	288	190	141	94
B2	383	251	186	123	383	251	186	123	331	218	162	107	295	194	145	96	260	171	127	85
C	172	113	84	56	172	113	84	56	149	98	73	49	133	88	66	44	117	77	58	38
D	122	81	60	40	122	81	60	40	106	70	52	35	95	63	47	31	83	55	41	-

Angle		$\alpha = 30^\circ$																			
TC	2.5																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	613	398	295	194	550	358	265	175	485	317	235	156	445	292	217	143	402	264	196	129	
B1	385	252	187	124	346	227	169	112	306	202	150	99	282	186	138	91	255	168	125	83	
B2	347	228	170	112	313	206	153	101	277	182	136	90	254	168	125	82	230	152	114	75	
C	156	103	77	51	141	93	69	46	125	82	62	41	115	76	57	38	104	69	51	34	
D	111	73	55	36	100	66	50	33	89	59	44	-	82	54	41	-	74	-	-	-	

Angle		$\alpha = 30^\circ$																			
TC	2																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	556	362	269	177	455	298	221	146	411	269	200	132	387	254	189	125	359	235	175	116	
B1	350	230	171	113	288	190	141	94	260	171	127	85	245	162	121	80	227	150	112	74	
B2	316	208	154	102	260	171	127	85	235	155	115	77	222	146	109	72	206	136	102	67	
C	142	94	70	46	117	77	58	38	106	70	52	35	100	66	50	33	93	62	46	31	
D	101	67	50	33	83	55	41	-	76	-	-	-	71	-	-	-	66	-	-	-	

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1268	1887	1720	1629	1268	1830	1663	1572	1126	1785	1617	1444	1024	1734	1566	1303	919
B1	1630	1470	1219	859	1630	1470	1219	859	1574	1378	1083	758	1532	1259	986	687	1483	1135	885	614
B2	1591	1426	1122	788	1591	1426	1122	788	1536	1272	996	694	1494	1160	905	629	1446	1044	811	561
C	916	683	532	369	916	683	532	369	854	606	470	324	780	550	425	292	703	493	380	260
D	728	512	394	271	728	512	394	271	646	451	347	237	587	409	313	214	527	365	279	190

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	2.5																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1170	1808	1640	1509	1074	1760	1590	1371	970	1726	1557	1282	903	1686	1501	1182	829
B1	1592	1430	1126	790	1553	1317	1033	722	1507	1195	933	649	1475	1116	869	602	1438	1027	798	551
B2	1554	1321	1036	724	1514	1214	949	660	1469	1100	856	594	1438	1026	797	550	1332	943	730	503
C	886	630	489	338	816	577	447	308	740	521	402	276	691	484	373	255	636	444	341	233
D	672	470	362	248	616	429	329	225	556	386	295	201	517	358	274	186	475	327	250	170

Angle	$0^\circ < \alpha \leq 10^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1812	1644	1522	1084	1734	1566	1303	919	1693	1524	1200	842	1670	1456	1144	801	1640	1371	1074	750
B1	1557	1329	1042	729	1483	1135	885	614	1446	1044	811	561	1399	994	771	532	1318	934	722	498
B2	1519	1226	958	667	1446	1044	811	561	1353	959	743	512	1291	913	706	486	1215	856	661	454
C	823	583	451	311	703	493	380	260	646	452	347	237	616	429	329	225	578	402	308	210
D	622	433	333	227	527	365	279	190	483	333	254	173	459	316	241	164	430	295	225	153

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28) (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	$10^\circ < \alpha \leq 15^\circ$																			
TC	3																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1601	1268	989	639	1601	1268	989	639	1543	1126	850	552	1444	1024	756	492	1303	902	662	432
B1	1219	842	618	404	1219	842	618	404	1083	724	534	349	986	644	475	312	872	565	418	274
B2	1122	758	558	365	1122	758	558	365	996	652	482	316	898	581	430	282	785	510	378	248
C	520	337	250	164	520	337	250	164	447	291	216	142	398	260	193	127	349	228	170	112
D	365	238	177	117	365	238	177	117	315	206	153	101	281	184	137	91	247	162	121	80

Angle	$10^\circ < \alpha \leq 15^\circ$																			
TC	2.5																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1561	1170	893	579	1509	1074	801	520	1371	963	706	461	1282	882	649	423	1182	795	585	383
B1	1126	760	559	366	1033	682	503	330	932	602	445	292	854	553	409	269	769	500	370	243
B2	1036	685	505	331	949	615	454	298	838	543	402	264	768	499	370	243	692	451	334	220
C	470	305	226	149	422	275	204	134	372	243	181	119	342	224	166	110	309	203	151	100
D	330	216	161	106	297	195	145	96	263	173	129	85	242	159	119	79	219	144	107	71

Angle	$10^\circ < \alpha \leq 15^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1522	1084	810	526	1303	902	662	432	1200	811	597	390	1144	763	563	368	1074	706	521	342
B1	1042	690	509	334	872	565	418	274	785	510	378	248	738	480	356	234	683	445	330	218
B2	958	622	459	302	785	510	378	248	706	460	341	225	666	434	322	212	616	402	298	197
C	427	278	206	136	349	228	170	112	315	207	154	102	297	195	145	96	275	181	135	89
D	300	197	147	97	247	162	121	80	223	147	110	73	210	139	103	69	195	129	96	64

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28) (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	15° < α ≤ 20°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1399	938	688	449	1399	938	688	449	1245	806	593	388	1114	717	529	347	972	629	464	305
B1	907	587	434	285	907	587	434	285	780	506	375	247	694	452	335	221	608	397	294	194
B2	816	530	392	258	816	530	392	258	702	458	339	223	625	408	302	200	548	358	266	176
C	363	237	176	116	363	237	176	116	313	205	153	101	279	183	137	90	245	162	120	80
D	256	168	126	83	256	168	126	83	222	146	109	72	198	131	97	65	174	115	86	57

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1294	847	622	407	1182	760	559	366	1039	671	495	325	951	615	455	299	856	556	411	270	
B1	819	531	394	258	734	478	354	233	649	423	314	207	595	389	289	190	538	352	262	173	
B2	738	479	355	234	662	431	320	211	585	382	284	187	537	351	261	173	485	318	237	156	
C	328	215	160	106	295	194	144	95	262	172	128	85	240	158	118	78	218	143	107	71	
D	232	153	114	76	209	138	103	68	186	122	91	61	171	113	84	56	155	102	76	51	

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1197	768	566	371	972	629	464	305	874	567	420	276	823	535	395	260	761	495	367	241	
B1	743	483	358	236	608	397	294	194	548	358	266	176	517	338	251	166	478	314	234	154	
B2	670	437	324	214	548	358	266	176	494	324	241	159	466	306	227	150	432	284	211	140	
C	299	196	146	97	245	162	120	80	222	146	109	72	209	138	103	68	194	128	96	63	
D	212	140	104	69	174	115	86	57	158	104	78	52	149	98	74	49	138	91	68	45	

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28) (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	20° < α ≤ 25°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1110	715	527	346	1110	715	527	346	953	616	456	299	846	549	406	268	740	483	358	235
B1	692	450	334	220	692	450	334	220	596	390	290	191	531	348	258	170	466	306	228	150
B2	623	407	302	199	623	407	302	199	538	352	262	173	479	314	234	154	421	277	206	136
C	279	183	136	90	279	183	136	90	241	159	118	78	215	142	106	70	189	125	93	62
D	197	130	97	64	197	130	97	64	171	113	84	56	153	101	76	50	135	89	67	44

Angle	20° < α ≤ 25°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1001	647	478	314	897	581	430	283	791	514	381	251	725	473	350	231	655	428	317	209
B1	626	408	303	200	562	368	273	180	497	326	242	160	457	300	223	147	413	271	202	134
B2	564	369	274	181	507	332	247	163	449	294	219	145	413	271	202	134	373	246	183	121
C	252	166	124	82	227	150	112	74	202	133	99	66	185	122	91	61	168	111	83	55
D	179	118	88	59	162	107	80	53	143	95	71	47	132	87	65	43	120	79	59	39

Angle	20° < α ≤ 25°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	908	588	435	286	740	483	358	235	667	436	323	213	629	411	305	201	582	381	283	187
B1	569	372	276	182	466	306	228	150	421	277	206	136	397	261	194	129	368	242	181	119
B2	513	336	250	165	421	277	206	136	381	250	186	123	358	236	176	117	333	219	163	108
C	230	151	113	75	189	125	93	62	171	113	84	56	162	107	80	53	150	99	74	49
D	163	108	81	54	135	89	67	44	122	81	60	40	115	76	57	38	107	71	53	35

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28) (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	25° < α < 30°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1110	715	527	346	1110	715	527	346	953	616	456	299	846	549	406	268	740	483	358	235
B1	692	450	334	220	692	450	334	220	596	390	290	191	531	348	258	170	466	306	228	150
B2	623	407	302	199	623	407	302	199	538	352	262	173	479	314	234	154	421	277	206	136
C	279	183	136	90	279	183	136	90	241	159	118	78	215	142	106	70	189	125	93	62
D	197	130	97	64	197	130	97	64	171	113	84	56	153	101	76	50	135	89	67	44

Angle	25° < α < 30°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1001	647	478	314	897	581	430	283	791	514	381	251	725	473	350	231	655	428	317	209
B1	626	408	303	200	562	368	273	180	497	326	242	160	457	300	223	147	413	271	202	134
B2	564	369	274	181	507	332	247	163	449	294	219	145	413	271	202	134	373	246	183	121
C	252	166	124	82	227	150	112	74	202	133	99	66	185	122	91	61	168	111	83	55
D	179	118	88	59	162	107	80	53	143	95	71	47	132	87	65	43	120	79	59	39

Angle	25° < α < 30°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	908	588	435	286	740	483	358	235	667	436	323	213	629	411	305	201	582	381	283	187
B1	569	372	276	182	466	306	228	150	421	277	206	136	397	261	194	129	368	242	181	119
B2	513	336	250	165	421	277	206	136	381	250	186	123	358	236	176	117	333	219	163	108
C	230	151	113	75	189	125	93	62	171	113	84	56	162	107	80	53	150	99	74	49
D	163	108	81	54	135	89	67	44	122	81	60	40	115	76	57	38	107	71	53	35

PV-ezRack SolarRoof Interface spacing table for **STEELINE STEEL-RIB 500 (ST28) (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																		
TC	3																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	892	578	428	281	892	578	428	281	767	499	370	244	683	445	331	218	598	391	291	192
B1	558	366	271	179	558	366	271	179	482	316	235	155	430	282	210	139	378	249	186	122
B2	504	330	246	162	504	330	246	162	435	286	213	141	389	256	190	126	342	225	168	111
C	226	149	111	74	226	149	111	74	196	129	96	64	175	115	86	57	154	102	76	51
D	161	106	79	53	161	106	79	53	139	92	69	46	125	82	62	41	110	73	54	36

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	805	524	388	255	723	471	349	230	638	417	309	204	586	383	285	188	530	347	258	171
B1	506	331	246	163	455	298	222	147	403	265	198	130	370	244	182	120	335	221	165	109
B2	457	300	223	147	411	270	202	133	364	240	178	118	335	221	165	109	303	200	149	98
C	205	135	101	67	185	122	91	60	164	108	81	54	151	100	75	49	137	90	68	45
D	146	96	72	48	132	87	65	43	117	77	58	38	108	71	53	35	98	65	48	32

Angle		$\alpha = 30^\circ$																		
TC	2																			
Building Height (m)	<=5				5<H<=10				10<H<=15				15<H<=20				20<H<=30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	731	476	354	233	598	391	291	192	540	354	263	173	509	334	248	164	472	309	230	152
B1	461	302	225	149	378	249	186	122	342	225	168	111	322	213	158	105	299	198	147	98
B2	416	274	203	134	342	225	168	111	309	204	152	101	291	192	143	95	270	178	134	88
C	187	123	92	61	154	102	76	51	139	92	69	46	132	87	65	43	122	81	60	40
D	133	88	66	44	110	73	54	36	99	66	49	33	94	62	47	31	87	58	43	-27

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1501	1887	1720	1629	1501	1830	1663	1572	1445	1785	1617	1527	1401	1734	1566	1476	1352
B1	1630	1470	1386	1270	1630	1470	1386	1270	1574	1416	1334	1220	1532	1374	1293	1181	1483	1327	1247	1138
B2	1591	1433	1350	1235	1591	1433	1350	1235	1536	1379	1297	1186	1494	1338	1257	1147	1446	1291	1212	1106
C	916	820	770	702	916	820	770	702	883	787	739	651	857	763	715	588	827	735	689	523
D	837	744	697	544	837	744	697	544	804	714	668	477	779	691	630	430	751	665	561	382

Angle	0° < α ≤ 10°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1849	1681	1590	1463	1808	1640	1549	1423	1760	1590	1501	1376	1726	1557	1468	1345	1686	1517	1429	1307
B1	1592	1434	1350	1236	1553	1395	1313	1200	1507	1350	1270	1159	1475	1320	1240	1131	1438	1284	1206	1099
B2	1554	1396	1314	1202	1514	1358	1277	1166	1469	1314	1234	1126	1438	1284	1205	1098	1400	1248	1171	1012
C	894	798	749	679	869	775	727	618	842	749	702	554	823	731	684	514	800	710	665	469
D	815	724	678	498	792	702	657	452	765	677	594	404	747	661	551	374	726	641	503	341

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1427	1734	1566	1476	1352	1693	1525	1437	1315	1670	1502	1414	1294	1640	1472	1386	1266	
B1	1557	1399	1317	1204	1483	1327	1247	1138	1446	1291	1212	1106	1423	1270	1192	1070	1395	1244	1166	1001	
B2	1519	1362	1281	1170	1446	1291	1212	1106	1407	1255	1178	1030	1386	1234	1158	978	1358	1209	1133	913	
C	872	777	729	625	827	735	689	523	805	714	668	477	792	702	657	452	775	687	619	422	
D	794	704	659	457	751	665	561	382	730	645	512	347	718	634	485	329	702	594	453	307	

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1601	1435	1348	1209	1601	1435	1348	1209	1543	1379	1285	1109	1498	1336	1238	989	1448	1280	1185	870
B1	1360	1202	1112	812	1360	1202	1112	812	1307	1143	1058	702	1266	1099	956	627	1216	1052	840	552
B2	1323	1160	1074	734	1323	1160	1074	734	1271	1104	968	635	1228	1062	863	567	1174	1017	759	500
C	748	648	502	330	748	648	502	330	712	586	434	286	684	522	388	256	655	459	341	226
D	665	479	356	235	665	479	356	235	633	415	309	204	564	371	276	183	496	326	243	161

Angle		10° < α ≤ 15°																		
TC		2.5																		
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1561	1397	1305	1164	1520	1357	1261	1047	1472	1309	1211	927	1440	1271	1176	852	1401	1227	1137	770
B1	1324	1162	1076	736	1286	1121	1012	663	1243	1075	895	588	1207	1045	823	541	1166	1005	744	490
B2	1288	1122	1015	666	1250	1082	914	600	1200	1038	809	532	1166	1004	743	490	1126	907	673	443
C	723	614	455	300	698	553	410	270	669	489	363	240	651	450	335	221	621	407	303	200
D	643	435	323	214	597	392	292	193	528	347	259	171	486	320	238	158	440	290	216	143

Angle		10° < α ≤ 15°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1525	1362	1266	1059	1448	1280	1185	870	1408	1236	1145	785	1386	1211	1122	741	1357	1181	1048	688	
B1	1290	1125	1023	671	1216	1052	840	552	1174	1017	759	500	1150	966	716	472	1121	895	664	438	
B2	1254	1086	924	606	1174	1017	759	500	1134	926	686	452	1111	873	647	426	1082	809	601	396	
C	700	559	415	273	655	459	341	226	633	415	309	204	597	392	292	193	553	364	271	179	
D	604	396	295	195	496	326	243	161	448	295	220	146	423	279	208	138	392	259	193	128	

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340 (cont)**

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1297	1200	903	1482	1297	1200	903	1425	1233	1142	781	1374	1186	1063	697	1312	1136	934	614	
B1	1232	1066	873	574	1232	1066	873	574	1171	1014	754	497	1126	909	674	444	1078	798	593	391	
B2	1190	1030	788	518	1190	1030	788	518	1131	920	682	450	1088	821	609	402	1042	722	536	354	
C	664	477	354	234	664	477	354	234	630	413	307	203	561	369	275	182	493	325	242	160	
D	515	339	252	167	515	339	252	167	446	294	219	145	398	263	196	130	350	231	173	115	

Angle		15° < α ≤ 20°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1444	1254	1161	819	1401	1210	1120	737	1342	1160	995	654	1303	1127	915	601	1259	1090	828	545	
B1	1191	1031	791	520	1149	962	712	470	1102	851	631	417	1070	782	581	383	1034	708	526	347	
B2	1150	965	715	471	1109	868	644	425	1064	769	571	377	1034	707	526	347	975	640	476	314	
C	642	433	322	213	594	390	290	192	526	346	258	171	483	318	237	157	437	288	215	142	
D	467	308	229	152	421	277	207	137	373	246	184	122	343	227	169	112	311	206	154	102	

Angle		15° < α ≤ 20°																		
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1407	1214	1125	745	1312	1136	934	614	1267	1097	844	555	1242	1074	796	524	1210	996	738	486
B1	1153	973	721	474	1078	798	593	391	1042	722	536	354	1022	681	506	334	962	631	470	310
B2	1114	878	651	430	1042	722	536	354	995	652	486	321	938	615	458	303	869	571	425	282
C	601	394	293	194	493	325	242	160	446	294	219	145	421	277	207	137	390	258	192	127
D	426	281	209	139	350	231	173	115	317	210	157	104	299	198	148	98	278	184	137	91

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	1061	695	1372	1185	1061	695	1304	1128	916	603	1254	1085	818	538	1199	971	720	474	
B1	1126	906	672	443	1126	906	672	443	1071	783	582	384	1030	699	520	343	938	615	458	303	
B2	1087	818	608	401	1087	818	608	401	1035	708	526	348	964	633	470	311	847	557	414	274	
C	560	368	274	181	560	368	274	181	484	319	238	157	432	285	213	141	381	251	187	124	
D	397	262	195	130	397	262	195	130	344	227	170	113	307	203	152	101	271	179	134	89	

Angle		20° < α ≤ 25°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	1146	961	632	1278	1106	865	569	1226	1034	767	505	1191	950	705	465	1150	859	638	421	
B1	1089	822	610	402	1050	740	550	363	1000	655	487	322	918	603	449	297	830	546	406	269	
B2	1052	742	551	364	1015	669	498	329	902	593	442	292	830	546	406	269	750	494	368	244	
C	508	334	249	165	457	301	225	149	405	267	199	132	373	246	184	122	338	223	167	111	
D	360	238	178	118	325	215	160	106	288	191	142	95	265	176	131	87	240	159	119	79	

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1284	1110	876	575	1199	971	720	474	1159	876	650	429	1136	826	614	405	1107	767	570	377	
B1	1054	748	556	367	938	615	458	303	847	557	414	274	798	526	391	259	741	488	363	241	
B2	1019	676	503	332	847	557	414	274	766	504	375	249	722	475	354	234	670	442	329	218	
C	462	305	227	150	381	251	187	124	344	227	170	113	325	215	160	106	301	199	149	99	
D	328	217	162	108	271	179	134	89	245	162	121	81	231	153	115	76	215	142	107	71	

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1372	1185	1061	695	1372	1185	1061	695	1304	1128	916	603	1254	1085	818	538	1199	971	720	474	
B1	1126	906	672	443	1126	906	672	443	1071	783	582	384	1030	699	520	343	938	615	458	303	
B2	1087	818	608	401	1087	818	608	401	1035	708	526	348	964	633	470	311	847	557	414	274	
C	560	368	274	181	560	368	274	181	484	319	238	157	432	285	213	141	381	251	187	124	
D	397	262	195	130	397	262	195	130	344	227	170	113	307	203	152	101	271	179	134	89	

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1326	1146	961	632	1278	1106	865	569	1226	1034	767	505	1191	950	705	465	1150	859	638	421	
B1	1089	822	610	402	1050	740	550	363	1000	655	487	322	918	603	449	297	830	546	406	269	
B2	1052	742	551	364	1015	669	498	329	902	593	442	292	830	546	406	269	750	494	368	244	
C	508	334	249	165	457	301	225	149	405	267	199	132	373	246	184	122	338	223	167	111	
D	360	238	178	118	325	215	160	106	288	191	142	95	265	176	131	87	240	159	119	79	

Angle	25° < α < 30°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1284	1110	876	575	1199	971	720	474	1159	876	650	429	1136	826	614	405	1107	767	570	377
B1	1054	748	556	367	938	615	458	303	847	557	414	274	798	526	391	259	741	488	363	241
B2	1019	676	503	332	847	557	414	274	766	504	375	249	722	475	354	234	670	442	329	218
C	462	305	227	150	381	251	187	124	344	227	170	113	325	215	160	106	301	199	149	99
D	328	217	162	108	271	179	134	89	245	162	121	81	231	153	115	76	215	142	107	71

PV-ezRack SolarRoof Interface spacing table for **REVOLUTION MAXLINE 340 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC	3																				
Building Height (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1276	1104	860	566	1276	1104	860	566	1213	1004	744	490	1167	896	665	439	1117	787	585	387	
B1	1048	735	546	361	1048	735	546	361	970	637	474	313	866	569	423	280	761	501	373	247	
B2	1013	665	494	326	1013	665	494	326	876	576	429	283	782	514	383	254	688	453	338	224	
C	455	299	223	148	455	299	223	148	393	260	194	128	352	232	173	115	310	205	153	102	
D	323	213	159	106	323	213	159	106	280	185	138	92	250	166	124	82	221	146	109	73	

Angle		$\alpha = 30^\circ$																			
TC	2.5																				
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1233	1053	780	513	1189	948	703	463	1141	839	623	411	1109	771	573	378	1064	698	519	343	
B1	1014	667	496	328	916	601	447	296	810	533	397	263	746	490	366	242	674	445	331	219	
B2	919	603	449	297	827	544	405	268	733	482	359	238	674	444	331	219	610	402	300	199	
C	412	272	203	135	372	245	183	121	330	218	163	108	303	201	150	100	275	182	136	90	
D	293	194	145	96	265	175	131	87	235	156	116	77	216	143	107	71	196	130	97	65	

Angle	$\alpha = 30^\circ$																			
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1194	958	711	468	1117	787	585	387	1080	711	530	350	1023	672	500	331	949	623	464	307
B1	926	608	453	299	761	501	373	247	688	453	338	224	649	428	319	211	602	397	296	197
B2	837	550	410	271	688	453	338	224	622	410	306	202	586	387	289	191	544	359	268	178
C	376	248	185	123	310	205	153	102	280	185	139	92	265	175	131	87	246	163	122	81
D	268	177	132	88	221	146	109	73	200	133	99	66	189	125	94	62	175	116	87	58

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface ER-I-09 and ER-I-34
Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		0° < α ≤ 10°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1842	1397	1125	809	1842	1397	1125	809	1681	1260	1007	719	1561	1159	921	654	1430	1052	832	587	
B1	1339	984	778	548	1339	984	778	548	1208	879	691	484	1112	804	629	438	1010	724	565	391	
B2	1246	910	717	502	1246	910	717	502	1122	811	635	443	1031	741	578	401	934	666	518	358	
C	610	436	340	235	610	436	340	235	545	387	300	207	498	351	271	187	449	315	242	166	
D	464	327	252	173	464	327	252	173	412	288	221	151	375	261	200	136	336	233	178	121	

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1733	1303	1045	747	1620	1208	963	685	1493	1103	876	619	1410	1035	818	576	1313	958	754	529	
B1	1250	913	718	504	1159	840	659	461	1059	762	595	414	994	712	554	385	920	655	509	352	
B2	1162	842	661	462	1075	775	606	422	981	702	546	378	920	655	509	351	850	602	466	321	
C	565	402	312	216	521	368	285	196	472	332	256	176	441	309	238	163	406	283	218	149	
D	429	300	231	158	393	274	210	144	355	246	189	128	330	229	175	119	303	209	160	108	

Angle	0° < α ≤ 10°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1632	1218	972	692	1430	1052	832	587	1332	972	766	538	1278	929	730	511	1209	876	686	479
B1	1169	848	666	465	1010	724	565	391	934	666	518	358	893	634	492	340	841	595	461	318
B2	1085	782	611	426	934	666	518	358	863	612	474	327	824	582	450	310	776	546	422	290
C	525	372	288	198	449	315	242	166	413	288	222	151	393	274	210	144	369	256	196	134
D	397	277	212	145	336	233	178	121	308	213	162	110	293	202	154	104	274	189	144	97

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	10° < α ≤ 15°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1125	809	631	408	1125	809	631	408	1007	719	542	352	921	654	482	314	832	575	422	275
B1	778	537	394	258	778	537	394	258	691	462	340	222	629	411	303	199	557	361	266	175
B2	717	483	356	233	717	483	356	233	635	416	307	202	573	370	274	180	501	325	241	158
C	332	215	159	105	332	215	159	105	286	186	138	91	254	166	123	81	223	146	108	72
D	233	152	113	75	233	152	113	75	201	132	98	65	179	118	88	58	157	104	77	51

Angle	10° < α ≤ 15°																			
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1045	747	570	369	963	685	511	332	876	615	451	294	818	563	414	270	754	507	373	244
B1	718	485	357	234	659	435	321	210	595	385	284	186	545	353	261	171	490	318	236	155
B2	661	437	322	211	606	392	290	190	535	346	257	169	490	318	236	155	442	288	214	141
C	300	195	144	95	269	175	130	86	238	155	115	76	218	143	106	70	197	129	96	64
D	211	138	103	68	190	124	93	61	168	110	82	54	154	102	76	50	140	92	69	45

Angle	10° < α ≤ 15°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	972	692	517	336	832	575	422	275	766	518	381	249	730	487	359	235	686	451	332	218
B1	666	441	325	213	557	361	266	175	501	325	241	158	471	306	227	150	436	284	210	138
B2	611	397	293	192	501	325	241	158	451	294	218	143	425	277	206	135	393	257	190	126
C	272	177	132	87	223	146	108	72	201	132	98	65	190	124	93	61	176	115	86	57
D	192	126	94	62	157	104	77	51	142	94	70	46	134	89	66	44	125	82	61	41

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																		
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	893	598	439	286	893	598	439	286	795	514	378	247	711	457	337	221	621	401	297	195
B1	579	374	277	182	579	374	277	182	498	323	239	158	442	288	214	141	388	254	188	124
B2	521	338	250	164	521	338	250	164	448	292	216	142	398	260	193	127	350	229	170	112
C	232	151	112	74	232	151	112	74	200	131	97	64	178	117	87	58	157	103	77	51
D	164	108	80	53	164	108	80	53	141	93	69	46	126	83	62	41	111	73	55	36

Angle		15° < α ≤ 20°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	825	541	397	259	754	485	357	234	663	428	316	207	607	393	290	190	547	354	263	173
B1	522	339	251	165	469	305	226	149	414	270	200	132	380	248	184	122	342	224	166	110
B2	470	306	226	149	422	275	204	134	373	244	181	119	342	224	166	110	310	203	150	100
C	210	137	102	68	189	124	92	61	167	110	82	54	153	101	75	50	139	91	68	45
D	148	98	73	48	134	88	66	44	118	78	58	39	109	72	54	36	99	65	49	32

Angle		15° < α ≤ 20°																		
TC	2																			
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	763	490	361	236	621	401	297	195	558	362	268	176	524	341	252	166	485	316	234	154
B1	474	309	229	150	388	254	188	124	350	229	170	112	330	216	161	106	306	200	149	98
B2	427	278	206	136	350	229	170	112	315	207	154	102	298	195	145	96	276	181	134	89
C	191	125	93	62	157	103	77	51	142	93	70	46	134	88	66	44	124	82	61	40
D	135	89	66	44	111	73	55	36	101	67	50	33	95	63	47	31	88	58	44	-27

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		20° < α ≤ 25°																		
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	709	456	337	220	709	456	337	220	608	394	291	191	540	350	259	171	473	308	228	150
B1	442	287	213	140	442	287	213	140	380	249	185	122	339	222	165	109	298	195	145	96
B2	398	259	193	127	398	259	193	127	343	225	167	110	306	201	149	98	269	177	131	87
C	178	117	87	58	178	117	87	58	154	101	75	50	137	90	67	45	121	80	59	39
D	126	83	62	41	126	83	62	41	109	72	54	36	98	65	48	32	86	57	43	-

Angle		20° < α ≤ 25°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	639	413	305	200	572	371	275	180	505	328	243	160	462	302	224	147	417	273	202	133
B1	399	261	194	127	358	234	174	115	317	208	154	102	291	191	142	94	263	173	129	85
B2	360	235	175	115	323	212	158	104	286	188	140	92	263	173	129	85	238	157	117	77
C	161	106	79	52	145	96	71	47	129	85	63	42	118	78	58	39	107	71	53	35
D	114	76	56	37	103	68	51	34	91	61	45	30	84	56	42	-	76	51	38	-

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	579	376	278	183	473	308	228	150	426	278	207	136	401	262	195	128	371	243	180	119	
B1	363	238	176	116	298	195	145	96	269	177	131	87	254	166	124	82	235	154	115	76	
B2	327	214	159	106	269	177	131	87	242	160	119	78	229	150	112	74	212	140	104	69	
C	147	97	72	48	121	80	59	39	109	72	54	36	103	68	51	34	96	63	47	31	
D	104	69	51	34	86	57	43	-	78	52	39	-	73	-	-	-	68	-	-	-	

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																		
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	709	456	337	220	709	456	337	220	608	394	291	191	540	350	259	171	473	308	228	150
B1	442	287	213	140	442	287	213	140	380	249	185	122	339	222	165	109	298	195	145	96
B2	398	259	193	127	398	259	193	127	343	225	167	110	306	201	149	98	269	177	131	87
C	178	117	87	58	178	117	87	58	154	101	75	50	137	90	67	45	121	80	59	39
D	126	83	62	41	126	83	62	41	109	72	54	36	98	65	48	32	86	57	43	-

Angle		25° < α < 30°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	639	413	305	200	572	371	275	180	505	328	243	160	462	302	224	147	417	273	202	133
B1	399	261	194	127	358	234	174	115	317	208	154	102	291	191	142	94	263	173	129	85
B2	360	235	175	115	323	212	158	104	286	188	140	92	263	173	129	85	238	157	117	77
C	161	106	79	52	145	96	71	47	129	85	63	42	118	78	58	39	107	71	53	35
D	114	76	56	37	103	68	51	34	91	61	45	30	84	56	42	-	76	51	38	-

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	579	376	278	183	473	308	228	150	426	278	207	136	401	262	195	128	371	243	180	119	
B1	363	238	176	116	298	195	145	96	269	177	131	87	254	166	124	82	235	154	115	76	
B2	327	214	159	106	269	177	131	87	242	160	119	78	229	150	112	74	212	140	104	69	
C	147	97	72	48	121	80	59	39	109	72	54	36	103	68	51	34	96	63	47	31	
D	104	69	51	34	86	57	43	-	78	52	39	-	73	-	-	-	68	-	-	-	

PV-ezRack SolarRoof Interface spacing table for **STEELINE LOKDECK 680 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																		
TC	3																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	569	369	273	179	569	369	273	179	490	319	236	156	435	284	211	139	382	250	185	122
B1	357	233	174	114	357	233	174	114	308	202	150	99	274	180	134	89	242	158	118	78
B2	322	210	157	103	322	210	157	103	278	182	136	90	248	163	122	80	218	143	107	70
C	144	95	71	47	144	95	71	47	125	82	61	41	112	74	55	37	98	65	49	32
D	103	68	51	34	103	68	51	34	89	59	44	-	79	53	39	-	70	-	-	-

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	514	334	247	162	462	300	223	147	407	266	197	130	374	245	182	120	337	221	165	109
B1	323	211	158	104	290	190	142	94	257	169	126	83	236	155	116	77	214	141	105	70
B2	291	191	142	94	262	172	128	85	232	153	114	75	214	141	105	70	194	127	95	63
C	131	86	64	43	118	78	58	39	105	69	52	34	96	64	48	32	87	58	43	-
D	93	62	46	31	84	56	42	-	75	-	-	-	69	-	-	-	62	-	-	-

Angle		$\alpha = 30^\circ$																		
TC	2																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	467	304	225	149	382	250	185	122	344	225	167	111	325	213	158	105	301	197	147	97
B1	294	193	143	94	242	158	118	78	218	143	107	70	206	135	101	67	190	126	94	62
B2	266	174	130	86	218	143	107	70	197	130	97	64	186	122	91	61	173	114	85	56
C	119	79	59	39	98	65	49	32	89	59	44	-	84	56	42	-	78	52	39	-
D	85	56	42	-	70	-	-	-	63	-	-	-	60	-	-	-	56	-	-	-

PV-ezRack SolarRoof Interface spacing table for **Apdek 700**

Type of Rail

ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface

ER-I-09 and ER-I-34

Solar Panel Dimension

2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	0° < α ≤ 10°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1887	1720	1629	1410	1887	1720	1629	1410	1830	1663	1572	1252	1785	1617	1527	1139	1734	1566	1449	1022
B1	1630	1470	1355	955	1630	1470	1355	955	1574	1416	1204	843	1532	1374	1096	764	1483	1262	983	682
B2	1591	1433	1248	876	1591	1433	1248	876	1536	1379	1107	772	1494	1290	1006	699	1446	1161	902	623
C	916	760	591	410	916	760	591	410	883	673	522	360	857	612	473	325	781	548	422	289
D	809	569	438	301	809	569	438	301	718	502	386	264	653	454	348	237	586	406	310	211

Angle		0° < α ≤ 10°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1849	1681	1590	1301	1808	1640	1549	1193	1760	1590	1501	1078	1726	1557	1425	1004	1686	1517	1313	921	
B1	1592	1434	1252	878	1553	1395	1148	802	1507	1328	1038	722	1475	1241	966	670	1438	1142	886	613	
B2	1554	1396	1151	805	1514	1350	1055	734	1469	1223	952	660	1438	1141	886	612	1400	1049	812	559	
C	894	701	544	376	869	642	497	342	823	579	446	306	768	539	415	284	707	494	379	259	
D	747	523	402	275	684	477	366	250	618	429	328	224	575	398	304	207	528	364	278	189	

Angle		0° < α ≤ 10°																			
TC	2																				
Building Height (m)	≤5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1812	1644	1554	1205	1734	1566	1449	1022	1693	1525	1335	937	1670	1502	1272	891	1640	1472	1195	834	
B1	1557	1399	1159	810	1483	1262	983	682	1446	1161	902	623	1423	1106	858	592	1395	1038	803	553	
B2	1519	1362	1065	742	1446	1161	902	623	1407	1066	826	570	1386	1015	786	540	1351	952	735	505	
C	872	648	501	345	781	548	422	289	719	502	386	264	684	477	366	250	642	447	342	233	
D	691	482	370	253	586	406	310	211	537	371	283	192	510	352	268	182	478	328	250	170	

PV-ezRack SolarRoof Interface spacing table for Apdek 700 (cont)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		10° < α ≤ 15°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1601	1410	1100	711	1601	1410	1100	711	1543	1252	944	614	1498	1139	840	547	1448	1002	736	480	
B1	1355	936	687	449	1355	936	687	449	1204	805	593	388	1096	716	529	346	970	628	464	305	
B2	1248	842	620	406	1248	842	620	406	1107	726	535	351	998	646	478	314	873	566	419	276	
C	578	375	277	183	578	375	277	183	497	324	240	158	442	289	214	141	388	254	189	125	
D	405	265	197	130	405	265	197	130	350	229	171	113	312	205	153	101	274	180	134	89	

Angle		10° < α ≤ 15°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1561	1301	993	643	1520	1193	890	579	1472	1071	785	512	1425	981	721	471	1313	884	650	426	
B1	1252	846	622	407	1148	758	559	366	1036	670	495	325	949	615	455	299	854	555	411	270	
B2	1151	762	562	368	1055	684	505	331	932	604	447	294	854	555	411	270	770	502	372	245	
C	522	340	252	166	469	306	227	149	414	271	201	133	380	249	185	122	343	225	168	111	
D	367	240	179	118	330	217	161	107	292	192	143	95	269	177	132	87	243	160	119	79	

Angle	10° < α ≤ 15°																			
TC	2																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1525	1205	900	586	1448	1002	736	480	1335	902	664	434	1272	849	626	410	1195	785	580	380
B1	1159	767	566	370	970	628	464	305	873	566	419	276	821	534	396	261	759	495	367	242
B2	1065	692	510	335	873	566	419	276	786	511	379	250	740	482	358	236	685	447	332	219
C	474	309	229	151	388	254	189	125	350	230	171	113	330	217	161	107	306	201	150	99
D	334	219	163	108	274	180	134	89	248	163	122	81	234	154	115	76	217	143	107	71

PV-ezRack SolarRoof Interface spacing table for **Apdek 700 (cont)**

Type of Rail ER-R-ELT (refer to Note 10 for other compatible rails)

Type of Interface ER-I-09 and ER-I-34

Solar Panel Dimension 2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		15° < α ≤ 20°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1482	1042	765	499	1482	1042	765	499	1384	896	660	432	1238	797	588	385	1080	699	517	339	
B1	1009	653	482	317	1009	653	482	317	867	563	417	274	771	502	372	246	676	442	328	216	
B2	907	589	436	286	907	589	436	286	781	509	377	248	694	454	337	222	610	399	296	196	
C	403	264	196	129	403	264	196	129	348	228	170	112	310	204	152	100	273	180	134	89	
D	285	187	140	92	285	187	140	92	246	162	121	80	220	145	108	72	194	128	96	63	

Angle		15° < α ≤ 20°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1438	941	692	452	1314	845	622	407	1155	745	550	361	1057	684	506	332	952	618	457	301
B1	910	591	437	287	817	531	394	259	721	470	349	230	662	432	321	212	598	391	290	192
B2	820	533	395	260	736	480	356	234	650	425	315	208	597	390	290	192	539	354	263	174
C	365	239	178	118	328	216	160	106	291	191	142	94	267	176	131	87	242	159	119	79
D	258	170	127	84	233	153	114	76	206	136	102	67	190	125	94	62	172	114	85	56

Angle		15° < α ≤ 20°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1330	854	629	412	1080	699	517	339	972	631	467	307	915	594	440	290	846	551	408	269	
B1	826	538	398	262	676	442	328	216	610	399	296	196	574	376	280	185	532	349	259	171	
B2	745	486	360	238	610	399	296	196	550	361	268	177	518	340	253	167	480	315	235	155	
C	332	218	162	107	273	180	134	89	247	162	121	80	233	153	114	76	216	142	106	70	
D	235	155	116	77	194	128	96	63	175	116	87	57	165	109	82	54	154	102	76	50	

PV-ezRack SolarRoof Interface spacing table for **Apdek 700 (cont)**

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle	20° < α ≤ 25°																			
TC	3																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1234	795	587	384	1234	795	587	384	1059	685	507	333	941	611	452	298	824	536	398	262
B1	769	501	371	245	769	501	371	245	662	433	322	212	590	386	287	190	518	340	253	167
B2	693	453	336	222	693	453	336	222	598	391	291	192	533	350	260	172	468	308	229	151
C	310	203	151	100	310	203	151	100	268	176	131	87	239	158	118	78	210	139	104	69
D	219	145	108	72	219	145	108	72	190	126	94	62	170	112	84	56	150	99	74	49

Angle		20° < α ≤ 25°																		
TC	2.5																			
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	1114	719	531	349	997	647	479	315	879	572	423	279	806	525	389	257	728	475	353	233
B1	695	454	337	222	625	409	304	201	553	362	270	178	508	334	248	164	459	302	225	149
B2	627	410	305	201	564	370	274	182	499	327	244	162	458	302	225	149	414	273	203	134
C	281	185	138	91	253	167	124	82	224	148	110	73	206	136	102	67	187	123	92	61
D	199	132	98	65	180	119	89	59	159	105	79	52	147	97	73	48	133	88	66	44

Angle		20° < α ≤ 25°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1009	654	484	318	824	536	398	262	742	485	360	237	699	456	339	224	647	423	315	208	
B1	632	414	307	202	518	340	253	167	468	308	229	151	442	290	216	143	410	270	201	133	
B2	570	374	278	183	468	308	229	151	423	278	207	138	399	262	196	130	370	244	182	120	
C	256	168	126	83	210	139	104	69	190	126	94	62	180	119	89	59	167	110	82	55	
D	182	120	90	60	150	99	74	49	136	90	67	45	128	85	63	42	119	79	59	39	

PV-ezRack SolarRoof Interface spacing table for Apdek 700 (cont)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		25° < α < 30°																			
TC	3																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1234	795	587	384	1234	795	587	384	1059	685	507	333	941	611	452	298	824	536	398	262	
B1	769	501	371	245	769	501	371	245	662	433	322	212	590	386	287	190	518	340	253	167	
B2	693	453	336	222	693	453	336	222	598	391	291	192	533	350	260	172	468	308	229	151	
C	310	203	151	100	310	203	151	100	268	176	131	87	239	158	118	78	210	139	104	69	
D	219	145	108	72	219	145	108	72	190	126	94	62	170	112	84	56	150	99	74	49	

Angle		25° < α < 30°																			
TC	2.5																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1114	719	531	349	997	647	479	315	879	572	423	279	806	525	389	257	728	475	353	233	
B1	695	454	337	222	625	409	304	201	553	362	270	178	508	334	248	164	459	302	225	149	
B2	627	410	305	201	564	370	274	182	499	327	244	162	458	302	225	149	414	273	203	134	
C	281	185	138	91	253	167	124	82	224	148	110	73	206	136	102	67	187	123	92	61	
D	199	132	98	65	180	119	89	59	159	105	79	52	147	97	73	48	133	88	66	44	

Angle		25° < α < 30°																			
TC	2																				
Building Height (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	1009	654	484	318	824	536	398	262	742	485	360	237	699	456	339	224	647	423	315	208	
B1	632	414	307	202	518	340	253	167	468	308	229	151	442	290	216	143	410	270	201	133	
B2	570	374	278	183	468	308	229	151	423	278	207	138	399	262	196	130	370	244	182	120	
C	256	168	126	83	210	139	104	69	190	126	94	62	180	119	89	59	167	110	82	55	
D	182	120	90	60	150	99	74	49	136	90	67	45	128	85	63	42	119	79	59	39	

PV-ezRack SolarRoof Interface spacing table for Apdek 700 (cont)

Type of Rail	ER-R-ELT (refer to Note 10 for other compatible rails)
Type of Interface	ER-I-09 and ER-I-34
Solar Panel Dimension	2.1 m x 1 m (Refer to Note 25 for other panel sizes)

Angle		$\alpha = 30^\circ$																			
TC	3																				
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$				
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	
A	991	643	475	313	991	643	475	313	853	555	411	271	758	495	367	242	666	435	323	213	
B1	622	406	302	199	622	406	302	199	536	352	262	173	478	314	234	154	421	277	206	137	
B2	561	367	273	181	561	367	273	181	484	318	237	157	432	284	212	140	380	250	186	123	
C	251	166	123	82	251	166	123	82	218	144	107	71	194	128	96	64	171	113	85	56	
D	179	118	88	59	179	118	88	59	155	102	77	51	138	92	69	46	122	81	60	40	

Angle		$\alpha = 30^\circ$																		
TC	2.5																			
Building Height (m)	≤ 5				$5<H\leq10$				$10<H\leq15$				$15<H\leq20$				$20<H\leq30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	895	582	431	284	803	524	388	256	710	463	344	227	651	427	317	209	588	386	286	190
B1	562	369	274	181	506	332	247	163	448	294	219	145	412	271	202	134	373	246	183	122
B2	508	334	248	164	457	301	224	148	405	266	198	131	372	246	183	121	337	222	166	110
C	228	150	112	74	205	136	101	67	182	120	90	60	168	111	83	55	152	101	75	50
D	162	107	80	53	146	97	72	48	130	86	64	43	120	79	59	39	108	72	54	36

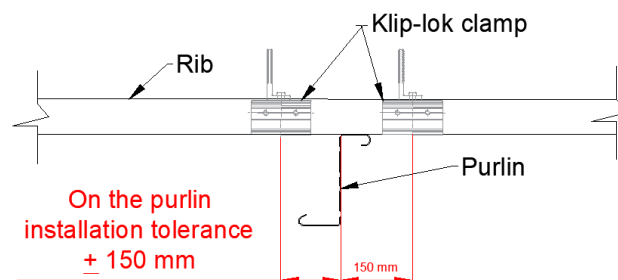
Angle		$\alpha = 30^\circ$																		
TC	2																			
Building Height (m)	≤ 5				$5<H\leq 10$				$10<H\leq 15$				$15<H\leq 20$				$20<H\leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
A	813	530	393	258	666	435	323	213	600	394	292	193	566	371	276	183	524	344	256	169
B1	512	336	250	166	421	277	206	137	380	250	186	123	358	236	176	117	333	219	164	109
B2	462	304	226	150	380	250	186	123	343	226	169	112	324	214	159	106	301	198	148	98
C	208	137	102	68	171	113	85	56	155	103	77	51	146	97	72	48	136	90	67	45
D	148	98	73	49	122	81	60	40	111	73	55	36	104	69	52	34	97	64	48	32

General Notes

Note 1. This engineering document was designed to cater for most common installation scenarios however, it does not cater for all of them. Contact Clenergy if you are unable to comply with any of the installation specifications listed on this document.

Note 2. This certificate covers both tilted and flush installations. For flush systems this document is limited to h/d or $h/b > 0.5$. Refer to flush systems documents for installations out of the h/d or h/b condition. Contact Clenergy if you are unable to comply with any of the installation specifications listed on this document.

Note 3. Installation to be done only on top of the purlins with a maximum tolerance of 150 mm.



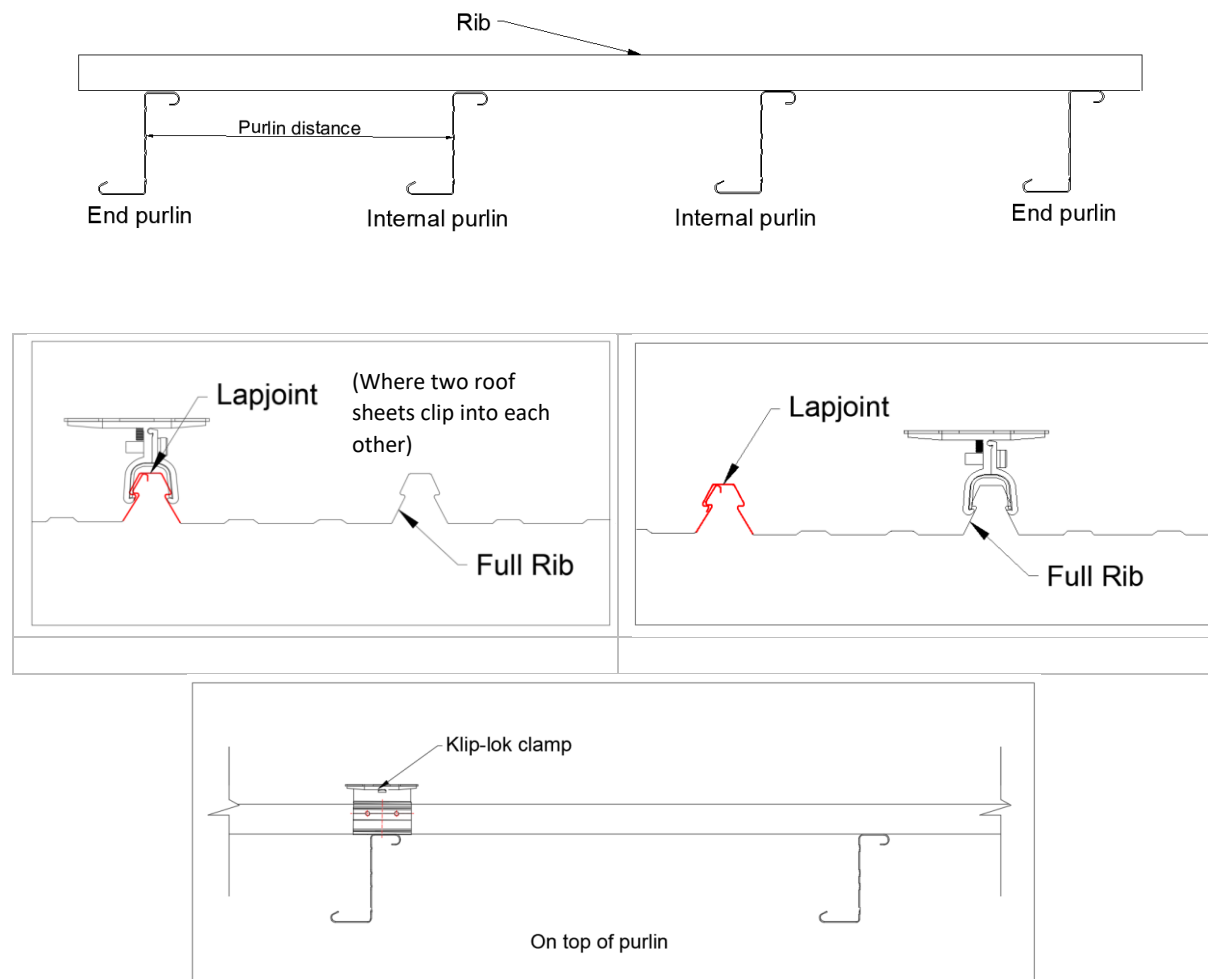
Note 4. Roof pitch between 1.5° and 10°.

Note 5. Exclusion for installation of klip-lok clamps depending on the roof sheet type to be as per the following table.

Roof Sheet type	Exclusions	Test Repot No.
Lysaght KLIP-LOK 700 Classic	N/A	MT-19/0633-A
Lysaght KLIP-LOK 700 Hi-Strength	N/A	MT-11/023
Lysaght KLIP-LOK 406	N/A	MT-17/001-A
Stramit Speed Deck Ultra	N/A	MT-11/023
Fielders Kingklip 700	N/A	MT-11/280
Stratco Topdeck 700	N/A	MT-17/001-B and MT-19/1007
Lysaght Longline 305	N/A	MT-13/133
Metroll Metlok 700	Exclude lapjoints	MT-19/0633-B
Stramit Speed Deck 500	N/A	MT-19/0762
Rev-klip 700	N/A	MT-19/1018-A
Metroll Metlok 500	Exclude lapjoints	7530/MJ
Steelene Steel-Rib 500	N/A	MT-19/1090-B
Revolution Maxline 340	N/A	MT-19/1018-B
Steelene Lokdeck 680	N/A	20-0028

Contact Clenergy for a project specific assessment if you cannot comply the above exclusions.

Refer to the below pictures to find clamp position, rib type and location on respective roof sheet.



Note 6. Lysaght Longline 305 fixing spacings were calculated based on the capacity of Clenergy's ER-I-29 clamp and the roof sheet. When using Clenergy's ER-I-34 clamp, Longline 305 fixing spacings shall be reduced as follows:

Wind Region A	Wind Region B	Wind Region C
-80%	-80%	-70%

Note 7. Exclusion for installation of Clenergy's ER-I-34 on Lysaght Longline 305 roof sheet to be as per the below table

Roof Sheet type	Exclusions	Test Repot No.
Lysaght Longline 305	Exclude lapjoints	MT- 20-0661

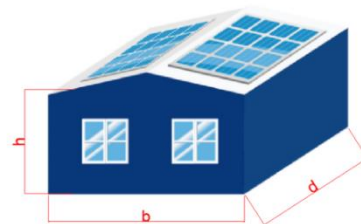
Note 8. Rails cannot run parallel to the ribs unless the applicable table spacings are equal or larger the purlin distance. Contact Clenergy if you are unable to comply with this condition or any of the installation specifications listed on this document.

Note 9. The spacing information in this document has been designed to be compliant with the capacity of the below items per roof area:

- Klip-lok clamp
- Roofing sheet
- Fixing clip between roofing sheet to purlin

Prior to carrying the PV installation, it is recommended to check that the roof sheet has been installed according to the manufacturers specifications and there are no missing clips.

Roof area is defined as a single surface that has no height variance.



Note 10. This document does not cover the following:

- Building frame capacity
- Off the purlin installation

Note 11. This certificate only covers the assessment of the Clenergy PV mounting system, including the components listed on note 4. Assessment of the roof structure, PV panels and other fixings are to be checked by the installer/contractor.

Note 12. The components mentioned in Appendix II are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2021

Note 13. For Terrain Category (TC) definition, please refer to clause 4.2.1 of AS/NZS 1170.2:2011 (R2016).

Note 14. Wind Direction Multiplier (Md) taken as 1.0. Refer to clause 3.3 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 15. Shielding Multiplier (Ms) taken as 1.0. Refer to clause 4.3 of AS/NZS 1170.2:2011 (R2016) for more information.

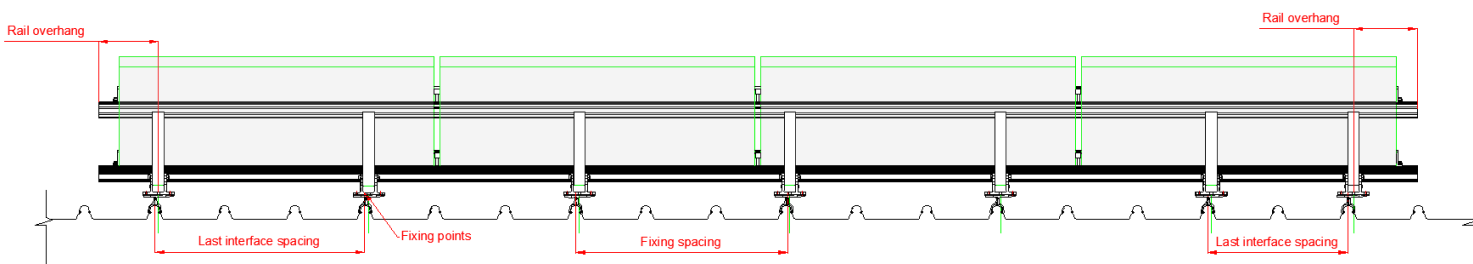
Note 16. Topographic Multiplier (Mt) taken as 1.0. Refer to clause 4.4 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 17. This certificate cannot be used if the site is located on a hill, ridge or escarpment. Contact Clenergy if the aforementioned condition is met on site.

Note 18. Clamping zone of the PV panels shall be according to the manufacturer's specifications.

Note 19. Capacities checked and compared against testing data from Clenergy Australia and NATA certified testing.

Note 20. Rail overhang ends where the panel finishes and this should be less than 40% of the last installed interface spacing.



Note 21. From the date of publication onwards, any amendment made to any of the above-mentioned Standards will make this report outdated and a new one will have to be released, unless the amendment has no implications on this certificate.

Note 22. All components from Clenergy must be installed according to manufacturer's specification and the instructions shown in the relevant installation manual. Please check the Clenergy Australia website or contact them for access to the most recent installation manuals.

Note 23. Only hip and gable roofs installations are covered on this certificate. Contact Clenergy if you are planning to install on a different roof type such as curved, multi-span (pitched and saw-tooth), mansard, circular bins, silos, tanks, pitched free roofs, troughed free roofs, hypar free roofs, canopies, awnings and cantilevered roofs.

Note 24. No consideration has been taken on the effect of snow loads. In case the roof is located in a snow prone area, a project specific design must be completed.

Note 25. Minimum number of bolts to be installed between the tilt leg base and the Klip-lok clamp to be one (1).

Note 26. Bolt between tilt leg base and the klip-lok clamp to be placed in the middle hole of the tilt leg base.

Note 27. This Engineering report is based on 2.1 m x 1 m panels and two rails per panel. However, a percentage increase could be applied on all interface spacings as shown on the following table when installing **flush interfaces**.

Number of rails per panel	Panel length (mm)	Spacing +/- W.R – A & B1	Spacing +/- W.R –B2 C & D
2 rails	≤ 1700	6%	10%
3 rails	≤ 1700	12%	18%
4 rails	≤ 1700	15%	20%
2 rails	≤ 1800	4%	7%
3 rails	≤ 1800	12%	18%
4 rails	≤ 1800	15%	20%
2 rails	≤ 1900	4%	7%
3 rails	≤ 1900	10%	15%
4 rails	≤ 1900	12%	18%
2 rails	≤ 2100	0%	0%
3 rails	≤ 2100	10%	15%
4 rails	≤ 2100	12%	18%
2 rails	≤ 2200	-12%	-12%
3 rails	≤ 2200	7%	12%
4 rails	≤ 2200	12%	18%
2 rails	≤ 2300	-16%	-12%
3 rails	≤ 2300	5%	12%
4 rails	≤ 2300	10%	15%
2 rails	≤ 2400	-19%	-15%
3 rails	≤ 2400	5%	10%
4 rails	≤ 2400	8%	12%

Note 28. This Engineering report is based on 2.1 m x 1 m panels and two rails per panel. However, for different panel sizes a percentage increase or decrease can be applied on all interface spacings as shown on the following table when installing **tilt interfaces**.

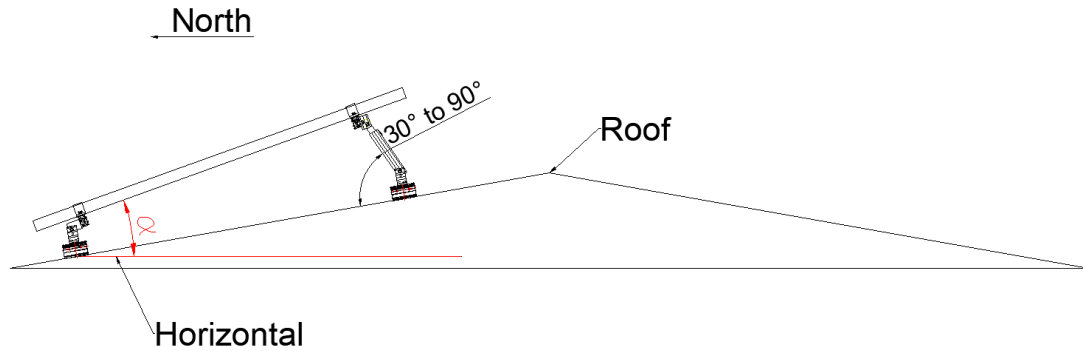
Number of rails per panel	Panel length (mm)	Spacing +/- W.R – A & B1	Spacing +/- W.R – B2, C & D
2 rails	≤ 1700	+ 6 %	+ 10 %
2 rails	≤ 1800	+ 4 %	+ 7 %
2 rails	≤ 1900	0 %	+ 5 %
2 rails	≤ 2000	0 %	+ 5 %
2 rails	≤ 2100	0 %	0 %
2 rails	≤ 2200	- 10 %	- 6 %
2 rails	≤ 2300	- 18 %	- 12 %
2 rails	≤ 2400	- 20 %	- 12 %

Note 29. Panel width cannot exceed 1.20 m for any of the above panel length dimensions. Maximum panel weight of 15 kg/m²

Note 30. If the installation is located in ISO corrosivity category C4 reduce the interface spacing by 5%. If the installation is located in ISO corrosivity category C5 reduce the interface spacing by 25%. For more details refer to Clenergy's warranty document.

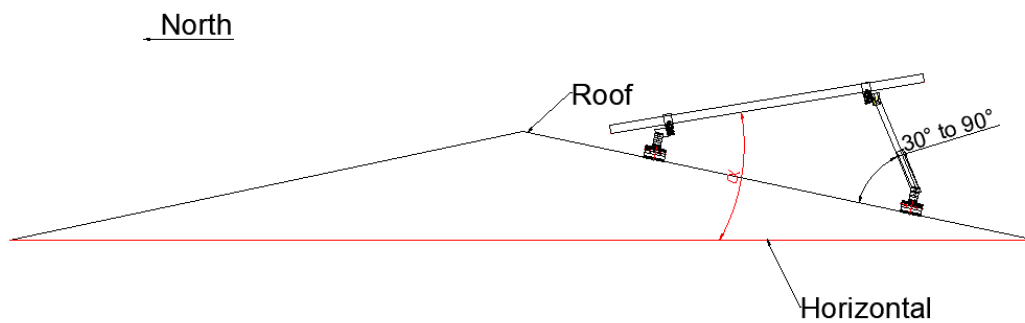
Note 31. Final tilt “ α ” identification as per below

Standard tilt



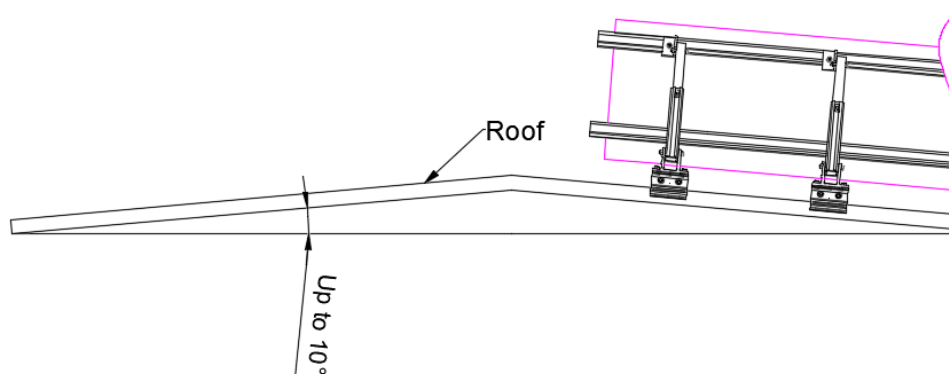
Back leg angle between 30° and 90°

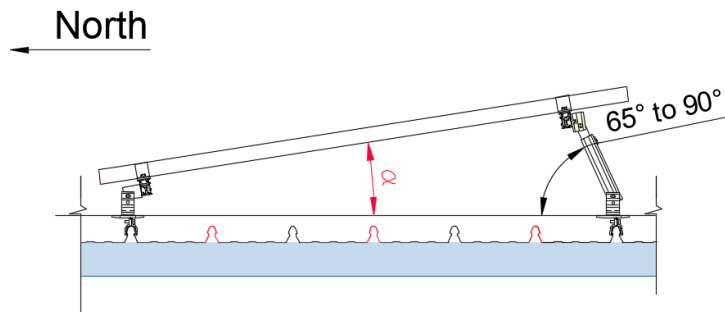
Reverse tilt



Back leg angle between 30° and 90°

Elite – Rail parallel to ribs





Back leg angle between 65° and 90°

Note 32. Roof Zone definition to be calculated as per below:

Step 1. Determine building height (h), width (b) and length (d).

Step 2. Check ratio of height to length/width (h/b and h/d)

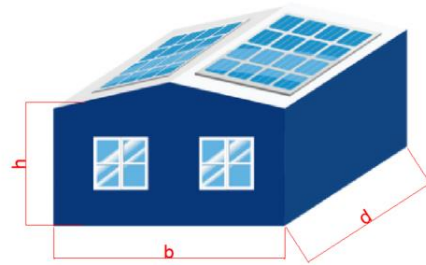
If both h/b and h/d < 0.2, then a = 2h

Step 3. If h/b and h/d > 0.2 then a = the lowest value between h, 0.2b and 0.2d

Step 4. Based on the roof pitch choose roof zone following the below.

Example for Klip-lok tilted systems

- Wind Region A
- Terrain Category: 3
- Building height: 5m
- Building width: 50 m
- Building length: 100 m
- Roof pitch: 3°
- Panel tilt: 10° (standard tilt)
- Reverse tilt installation
- Panel rail orientation: perpendicular to purlins
- Purlin spacing: 1500 mm
- Roof Sheet: Lysaght Klip-lok 700 Classic
- Panel dimension: 2.1 m x 1 m



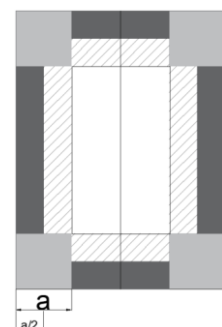
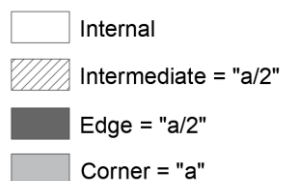
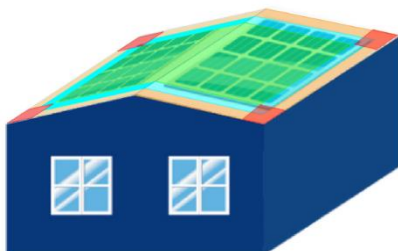
Step 1. Determine building height (5m), width (50 m) and length (100 m). ✓

Step 2. Check ratio of height to length/width (h/b and h/d)

If both h/b and h/d < 0.2, then a = 2h 5/50 = 0.1 ✓ 5/100 = 0.05 ✓ **a = 2h**

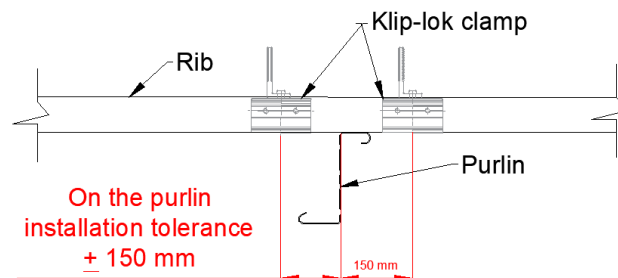
Step 3. If h/b and h/d > 0.2 then a = the lowest value between h, 0.2b and 0.2d. (does not apply for this example as both h/b and h/d < 0.2) ✗

Step 4. Based on the roof pitch choose roof zone Appendix 1



- Clamp spacing as per below based on the spacing tables:
 - Internal: 1887 mm
 - Intermediate: 1720 mm
 - Edge: 1629 mm
 - Corner: 1501 mm
- Exclusions as per **Note 4** for Klip-lok 700 Classic

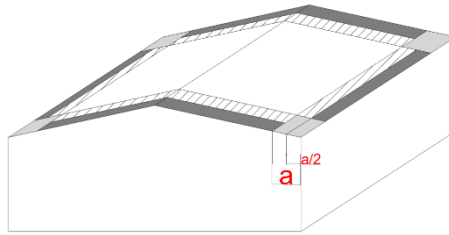
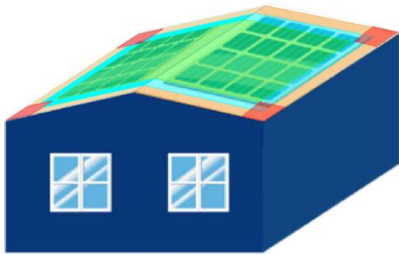
Installation only feasible on top of the purlins, therefore:



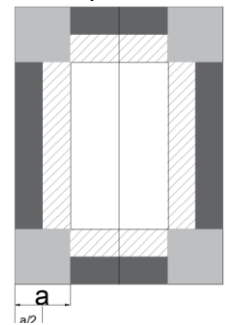
- Internal zone: 1500 mm (with a maximum tolerance of 150 mm)
- Intermediate zone: 1500 mm (with a maximum tolerance of 150 mm)
- Edge zone: 1500 mm (with a maximum tolerance of 150 mm)
- Corner zone: 1500 mm (with a maximum tolerance of 150 mm)

Appendix I- Roof zone definition

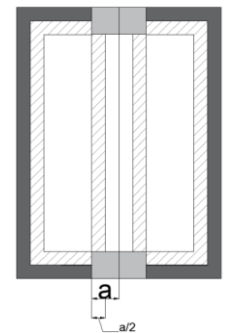
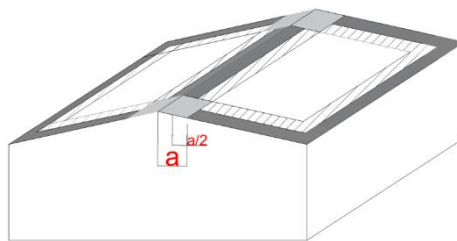
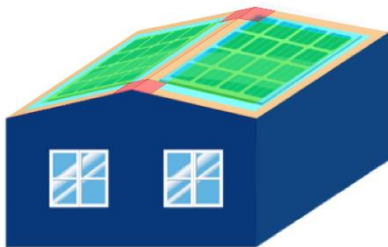
Roof Pitch < 10°



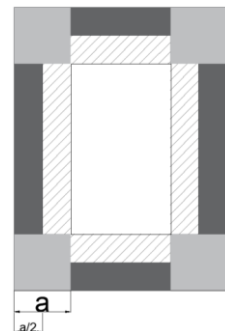
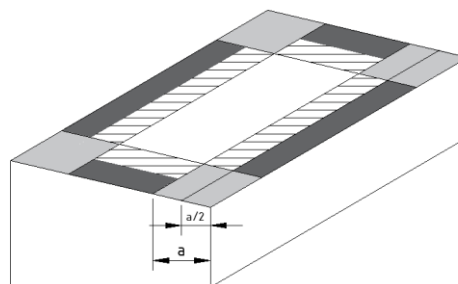
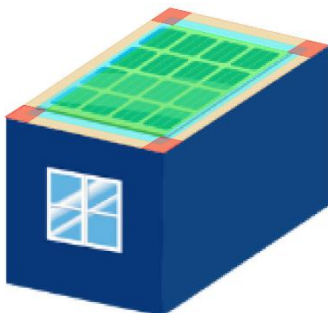
Top view



Flat/Mono – Slope Roof > 10°



Flat/Mono – Slope Roof



Legend:

- Internal
- Intermediate = "a/2"
- Edge = "a/2"
- Corner = "a"

Appendix II- Component list

The following components are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2021.

Components	Part No.	Description
Elite Rail	ER-R-ELT/XXXX	Elite Rail
Splice	ER-SP-ECO	Splice
Elite Rail Black	ER-R-ELT/XXXX/BA	Elite-Rail Black
Splice	ER-SP-ECO/BA	Splice, Black
Non-penetrative interface	ER-I-09	Klip-lok bracket
Non-penetrative interface	ER-I-09/100/45	Klip-lok bracket
Non-penetrative interface	ER-I-29/AU	Klip-lok bracket
Non-penetrative interface	ER-I-32/AU	Klip-lok bracket
Non-penetrative interface	ER-I-34	Brooklyn Klip-lok clamp
Non-penetrative interface	ER-I-34/CRC	Brooklyn Klip-lok clamp pre-assembly with cross connector clamp
Non-penetrative interface	ER-I-34/05A/EZC	Brooklyn Klip-lok clamp pre-assembly with Tin Interface with ezClick connection
Non-penetrative interface	ER-I-09/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-29/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-32/BA	Black Klip-lok bracket
Non-penetrative interface	ER-I-34/BA	Black Brooklyn Klip-lok clamp
Non-penetrative interface	ER-I-34/CRC/BA	Black Brooklyn Klip-lok clamp pre-assembly with cross connector clamp
Non-penetrative interface	ER-I-34/05A/EZC/BA	Black Brooklyn Klip-lok clamp pre-assembly with Tin Interface with ezClick connection
Inter Clamp	ER-IC-STXX	Inter Clamp = clamp + Z-Module + bolt
End Clamp	ER-EC-STXX	End Clamp = clamp + Z-Module + bolt
Inter Clamp	ER-IC-STXX/G	Inter Clamp with Grounding Pins
Security Inter Clamp	ER-IC-STXX/S	Security Inter Clamp
Security End Clamp	ER-EC-STXX/S	Security End Clamp
Clamp	C-U/30/46-G	Akashi Clamp for Frame Height 30-46mm with Grounding Clip
Clamp	C-U/30/46	Akashi Clamp for Frame Height 30-46mm
Inter Clamp	ER-IC-STXXB	Inter Clamp XX Black
End Clamp	ER-EC-STXXB	End Clamp XX Black
Inter Clamp	ER-IC-STXXB/G	Black Inter Clamp with Grounding Pins
Clamp	C-U/30/46-G/BA	Black Akashi Clamp with grounding clip
Clamp	C-U/30/46/BA	Black Akashi Clamp
End Clamp	ER-EC-DU35/40	End Clamp dual 35 or 40mm
End Clamp	ER-EC-DU40/46	End Clamp dual 40 or 46mm
Cross Connector Clamp	CRC-R/ECO	Cross Connector Clamp
Cross Connector Clamp	CRC-R/ECO-ZBW	Cross Connector Clamp with Z-Module
Cross Connection Clamp and Plate Kit	K-CRC/PT	Cross Connector Clamp and plate
Flush Mount Interface	ER-I-05	Tin Interface

Flush Mount Interface	ER-I-05/BA	Tin Interface Black
Flush Mount Interface	ER-I-05/CM	Tin Interface with click module
Flush Mount Interface	ER-I-05A/EZC/ECO	Tin Interface with ezClick connection
Flush Mount Interface	ER-I-05/C5	Tin Interface with C5 rated Screw
Tilt Legs	ER-TL-10/15	10°/15° Adjustable Tilt Legs
Tilt Legs	ER-TL-15/30	15°/30° Adjustable Tilt Legs
Tilt Legs	ER-TL-30/60	30°/60° Adjustable Tilt Legs
Tilt Legs	ER-TL-10/15/PS	10°/15° Adjustable Tilt Legs, Preassembly
Tilt Legs	ER-TL-10/15/PS/C5	10°/15° Adjustable Tilt Legs, Preassembly, C5 rated screws
Tilt Legs	ER-TL-15/30/PS	15°/30° Adjustable Tilt Legs, Preassembly
Tilt Legs	ER-TL-15/30/PS/C5	15°/30° Adjustable Tilt Legs, Preassembly, C5 rated screws
Tilt Legs	TL-10/15/L/PS	10°/15° L Feet Adjustable Tilt Legs, Preassembly
Tilt Legs	TL-15/30/L/PS	15°/30° L Feet Adjustable Tilt Legs, Preassembly
Tilt Legs	ER-TL-5/PS	5° Fixed Tilt Legs, Preassembly
Tilt Legs	ER-TL-10/PS	10° Fixed Tilt Legs, Preassembly
Tilt Legs	ER-TL-FF	Front Foot of Tilt Legs
Black Tilt Legs	ER-TL-10/15/BA	Black 10°/15° Adjustable Tilt Legs
Black Tilt Legs	ER-TL-15/30/BA	Black 15°/30° Adjustable Tilt Legs
End Clamp (*)	EC-FL/GE/XX/XX	End Clamp for Frameless Module (glued EPDM)
Inter Clamp (*)	IC-FL/GE/XX/XX	Inter Clamp for Frameless Module (glued EPDM)
End Clamp (*)	ER-EC-FL/XX/XX	End Clamp for Frameless Module
Inter Clamp (*)	ER-IC-FL/XX/XX	Inter Clamp for Frameless Module
Black End Clamp (*)	EC-FL/GE/XX/XX/B	Black End Clamp for Frameless Module (glued EPDM)
Black Inter Clamp (*)	IC-FL/GE/XX/XX/B	Black Inter Clamp for Frameless Module (glued EPDM)

(*) Subject to the panel manufacturer's installation guide.

Elite Rail Splice Certification Letter



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Date: 18 / 06 / 2024

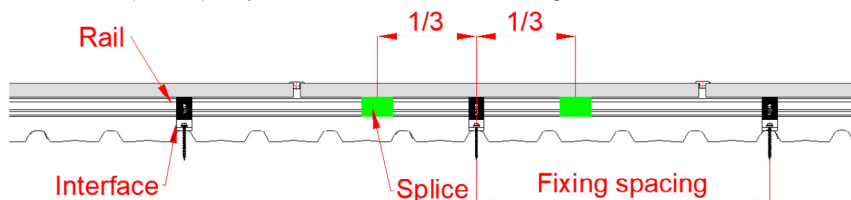
ER-SP-ELT & ER-SP-ELT/BA CERTIFICATION LETTER

MW Engineering Melbourne, being Structural Engineers within the meaning of Australian regulations, have assessed and certified ER-SP-ELT & ER-SP-ELT/BA splice component to be used with the following documents:

Ref. Number	Certificate	Version
CL-563-S	PV-ezRack SolarRoof Adjustable Tile (ECO & ELITE rails)	Rev.2
CL-688-S	PV-ezRack SADL Bracket Flush Mounting Interface spacing for Kingspan roof	Rev.1
CL-1151-Y	PV-ezRack Corrugated Profile Roof Adaptor Interface (ECO and Elite rails)	Rev.1
CL-1168-Y	PV-ezRack SolarRoof Penetrative Flush and Tilt interface	Rev.1
CL-1171-Y	PV-ezRack SolarRoof Tin and Tile penetrative Flush interface	Rev.1
CL-1172-Y	PV-ezRack SolarRoof Klip-lok Flush interface	Rev.1
CL-1173-Y	PV-ezRack SolarRoof Klip-lok Flush and Tilt interface	Rev.1

Note 1: ER-R-Elite rail splice can only be installed within 1/3 of the fixing spacing (center to center) from the nearest interface when fixing spacing is over 1500 mm.

Note 2: ER-R-ELT (Elite Rail) rail splice cannot be installed on rail overhangs.



The certificates will be valid unless an amendment is issued on any of the following codes:

- AS/NZS 1170.0- 2002 AMDT 4 2016 General Principles
- AS/NZS 1170.1- 2002 AMDT 4-2016 Imposed Loadings
- AS/NZS 1170.2- 2021 Wind Loadings
- AS/NZS 1664.1- 1997 AMDT 1:1999 Aluminium Code

Should you have any queries, do not hesitate to contact us.

Best Regards,

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