

PV-ezRack[®] SolarRoof[™] Non-Penetrative with Tilt Legs Installation Guide

Code-Compliant Planning and Installation Guide V2.0
Complying with AS/NZS1170.2-2011 AMDT 2-2016



1. Introduction

The Clenergy PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs has been developed as a universal PV-mounting system for roof-mounting on 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 PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs. This manual provides:

- 1) Supporting documentation for building permit applications relating to P PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs Universal PV Module Mounting System,
- 2) Planning and installation instructions.

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The PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs parts, when installed in accordance with this guide, will be structurally sound and will meet the AS/NZS1170.2:2011 Amdt 2- 2016 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.

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 PV-ezRack and other products are appropriate for the particular installation and the installation environment;
- Using only PV-ezRack parts and installer-supplied parts as specified by PV-ezRack (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 the 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 PV-ezRack® SolarRoof components as required in AS/NZS 5033-2014 ADMT 2 2-2018.
- Ensuring that the roof, its rafters/purlins, connections and other structural support members can support the array under building live load conditions;
- 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: 2014;
- Verifying atmospheric corrosivity zone of installation site by referring to AS 4312-2008 or consulting local construction business to determine appropriate products and installations.

2. Planning

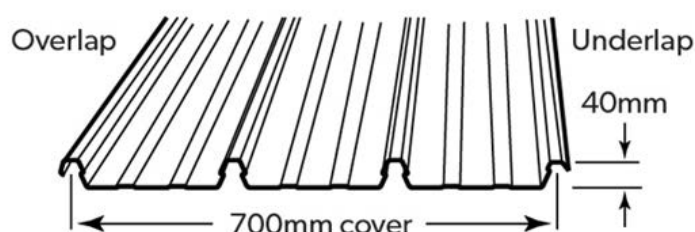
2.1 Determine the type of concealed roof

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.

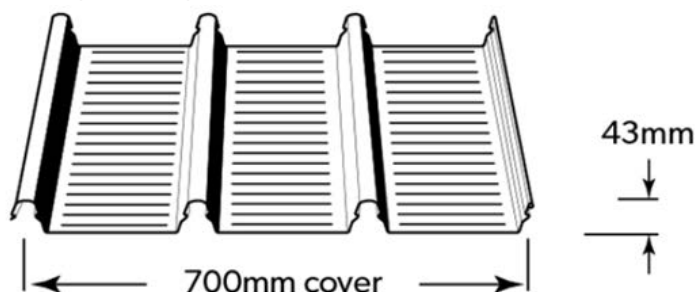
NOTES:

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.

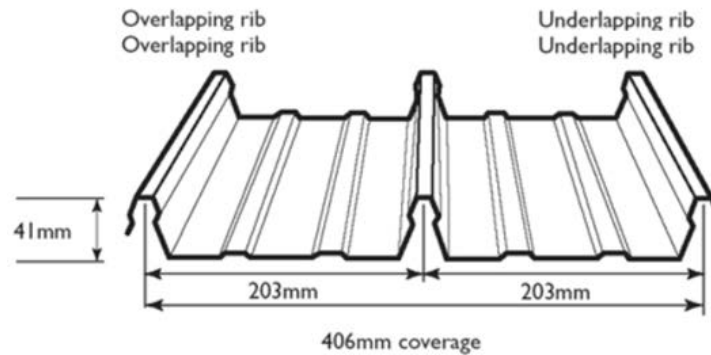
① Lysaght Klip Lok 700 Classic (Interface: ER-I-34, ER-I-09)



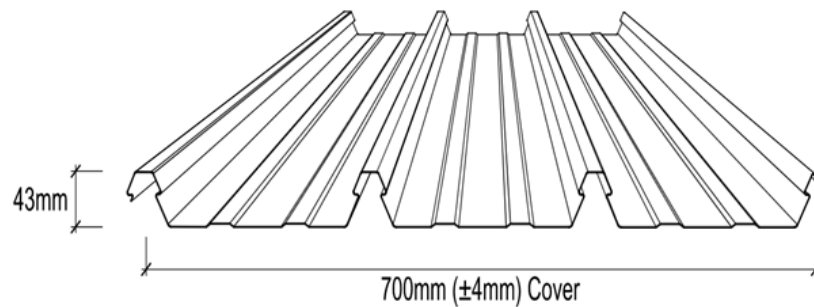
② Lysaght Klip-Lok 700 High Strength (Interface: ER-I-34, ER-I-09)



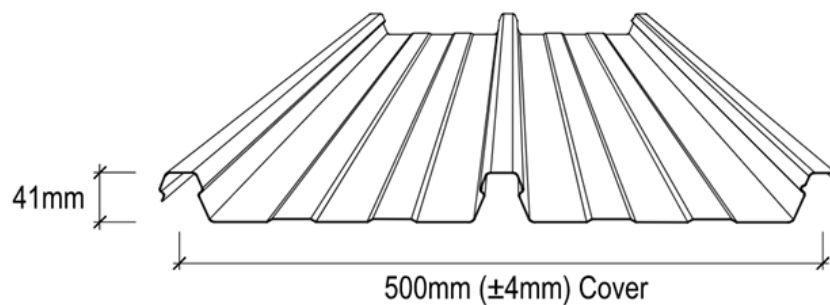
③ Lysaught Klip-Lok 406 (Interface: ER-I-34, ER-I-32/AU)



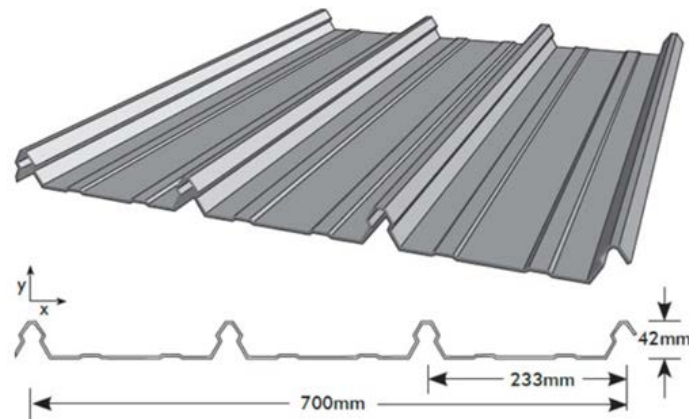
④ Stramit Speed Deck Ultra (Interface: ER-I-34, ER-I-09)



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



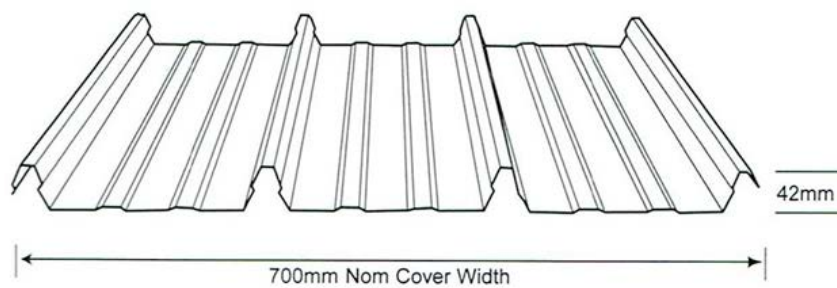
⑥ Fielders Kingklip 700 (Interface: ER-I-34, ER-I-09)



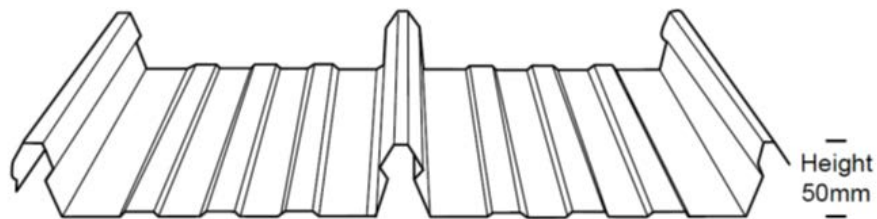
⑦ Stratco Topdeck 700 (Interface: ER-I-34, ER-I-09)



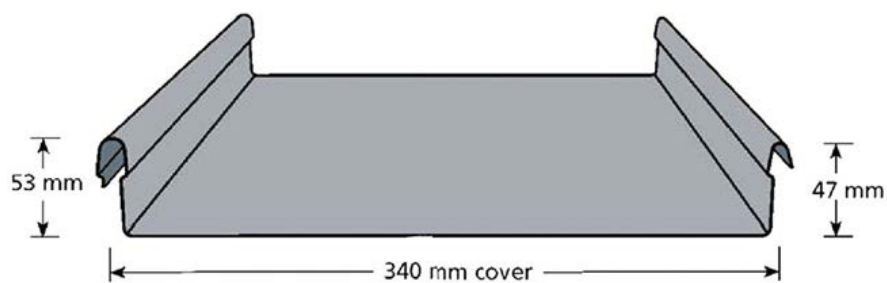
⑧ Metroll Metlok 700 (Interface: ER-I-34, ER-I-09)



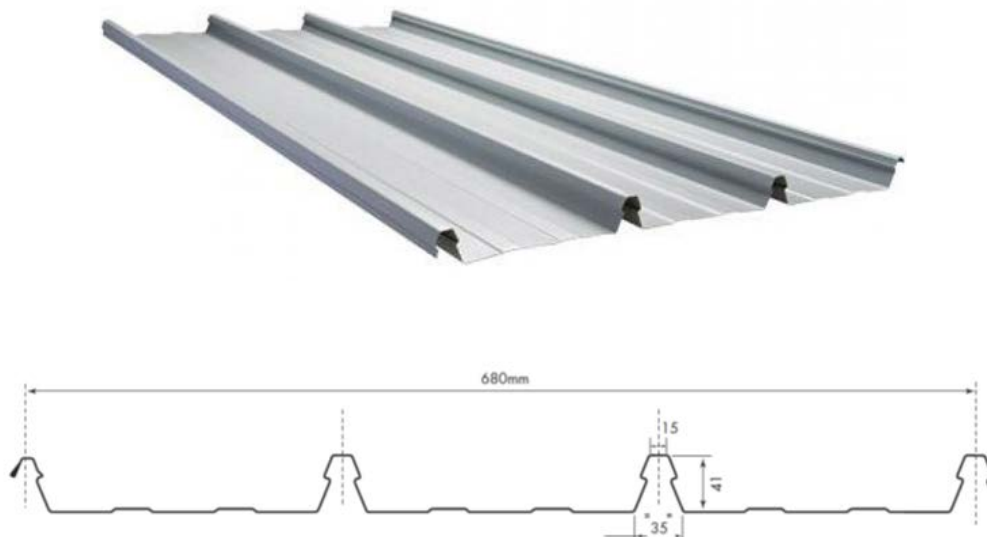
⑨ Metroll Metlok 500 (Interface: ER-I-34)



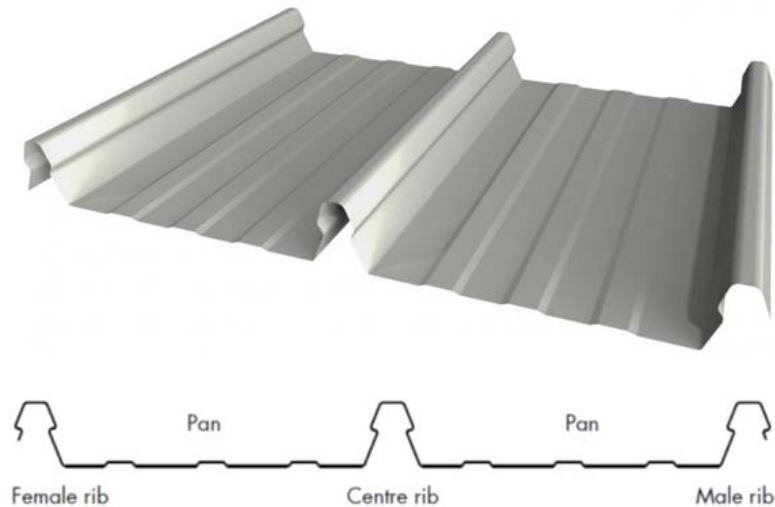
⑩ Revolution Maxline 340 (Interface: ER-I-34)



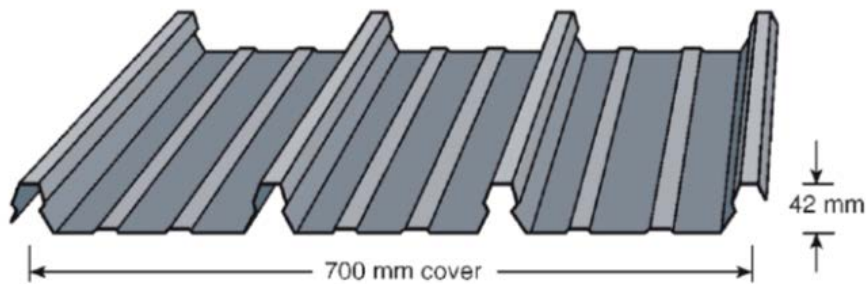
⑪ Steeline Lokdek 680 (Interface: ER-I-34)



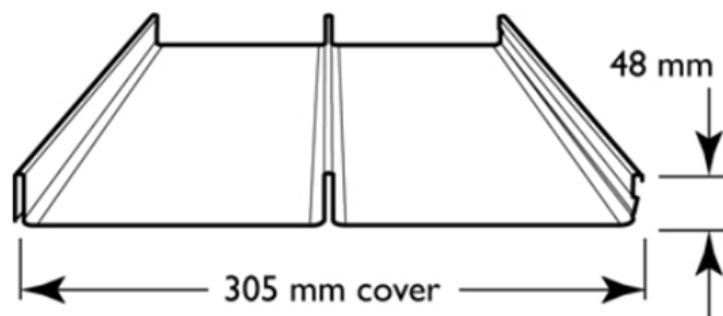
⑫ Steeline Steel-Rib 500 (ST28) (Interface: ER-I-34)



⑬ Rev-Klip 700 (Interface: ER-I-34)



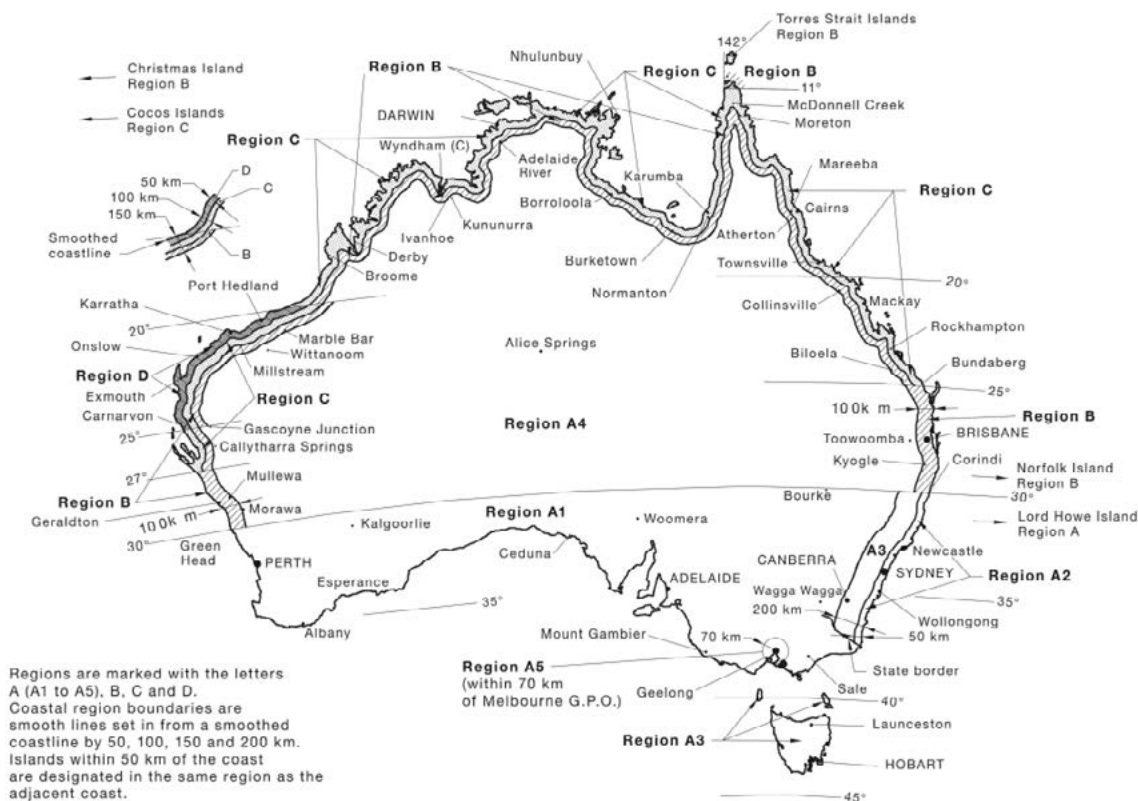
⑭ Lysaght LongLine 305 (Interface: ER-I-34, ER-I-29/AU)



Note: when using ER-I-34 for longline 305 roof sheet installation, please refer to generic note 17 in the engineering letter to apply for interface spacing reduction based on those for ER-I-29/AU.

2. Planning

2.2 Determine the wind region of your installation site



Region Definition:

Wind regions are pre-defined for the whole of Australia by the Australian Standard 1170.2. The Wind Region is an independent factor of surrounding topography or buildings.

- Most of Australia is designated Region A which indicates a Regional Wind Velocity of 43 m/s with wind average recurrence of 200 years.
- Some areas are designated Region B (52 m/s). Local authorities will advise if this applies in your area.

- Region C areas (64 m/s) are generally referred to as Cyclonic and are generally limited to northern coastal areas. Most Region C zones end 100km inland.
- Region D (79 m/s) is Australia's most extreme Cyclonic Region, located between the town of Carnarvon and Pardoo Station in Western Australia.

2.3 Determine the Terrain Category

You will need to determine the terrain category to ensure the installation meets the required standard.

Terrain Category 1 (TC1) – Very exposed open terrain with few or no obstructions and enclosed, limited-sized water surfaces at serviceability and ultimate wind speeds in all wind regions, e.g. flat, treeless, poorly grassed plains; rivers, canals and lakes; and enclosed bays extending less than 10km in the wind direction.

Terrain Category 1.5 (TC1.5) – Open water surfaces subjected to shoaling waves at serviceability and ultimate wind speeds in all win regions, e.g. near-shore ocean water; larger unenclosed bays on seas and oceans; lakes; and enclosed bays extending greater than 10km in the wind direction. The terrain height multipliers for this terrain category shall be obtained by the linear interpolation between the values for the TC1 and TC2.

Terrain Category 2 (TC2) – Open terrain, including grassland, with well-scattered obstructions having heights generally from 1.5m to 5m, 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 a few trees or isolated obstructions. This category is intermediate between TC2 and TC3 and represents the terrain in developing outer urban areas with scattered houses, or larger acreage developments with fewer than ten buildings per hectare. The terrain-height multipliers for this terrain category shall be obtained by linear interpolation between the values for the TC2 and TC3.

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

Terrain Category 4 (TC4) – Terrain with numerous larger, high (10m to 30m tall) and closely-spaced constructions buildings, such as large city centers 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.

2.4 Verify Atmospheric Corrosivity Zone of Installation Site

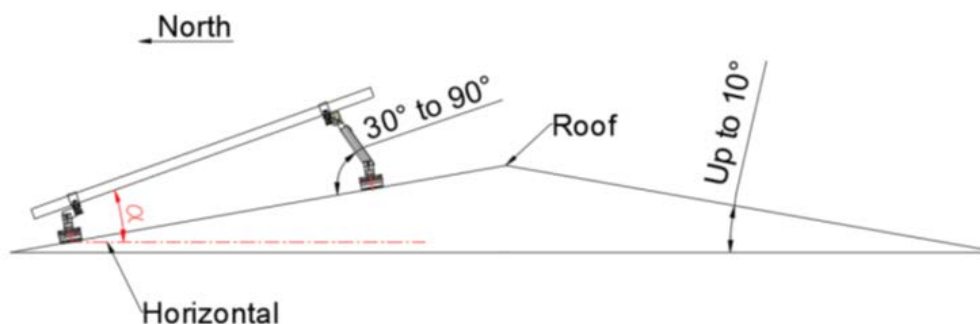
Please refer to "AS 4312-2008 Atmospheric Corrosivity Zones in Australia" or consult local construction business to verify corrosivity category of installation site to determine appropriate products and interface spacing. When standard products are installed in high corrosivity zones, like C4/C5, interface spacing reduction factor need to be applied. Please refer to the generic notes of Certification Letter for the details.

2.5 Determine the Height of the Installation Site

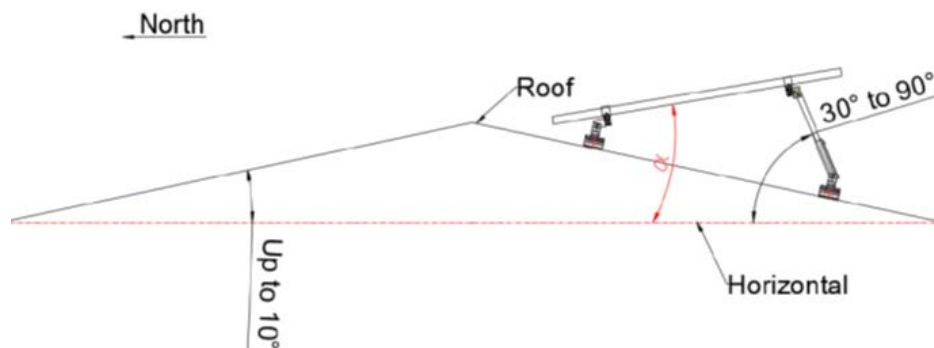
This document provides sufficient information for the PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs system installation up to heights of 30 meters. If your installation site is more than 30 meters high please contact Clenergy to obtain project specific engineering certificate to support your installation.

2.6 Determine Tilt Angle of Rear Leg

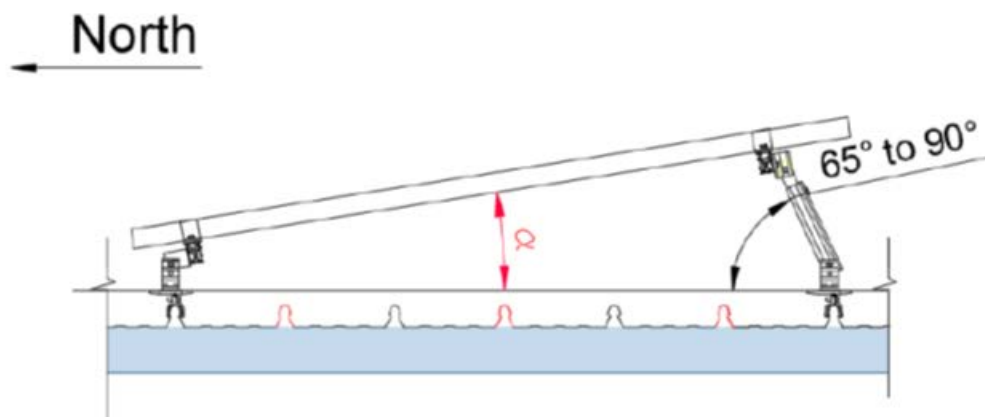
The PV-ezRack® SolarRoof™ Non-Penetrative with Tilt Legs system is used for roof slopes up to 10°.



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.

2.7 Determine the Installation Area of Roof

Please refer to the generic note 20 of Certification Letter to determine the installation area based on building height, length and width.

Please refer to note 16 in Certification Letter for roof sheet specific exclusion of installation of the Klip-lok interfaces. For example, for Lysaght KLIPLOK 700 Classic roof sheet, Lapjoints and full ribs installation when purlin spacing is over 2000 mm are excluded. An alternative option is to request a project specific engineering letter from the Clenergy if require installation on those excluded areas.

2.8 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.

2.9 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.

2.10 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 & Components

3. Tools & Components

3.1 Tools

Tools



Angle Grinder with Stone Disk



Drill Driver
(for M8 Hexagon Socket Screw)



Torque Spanner



Tape Measure



String & Marker Pen



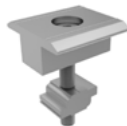
Spanner

3.2 Components

Component list



ER-EC-ST
End Clamp



ER-IC-ST
Inter Clamp



C-U/30/46-G
Universal Clamp



C-U/30/46
Universal Clamp



ER-EC-DU35/40
End Clamp, Dual 35 or
40mm



ER-EC-DU40/46
End Clamp, Dual 40 or
46mm



ER-R-ECO
ECO Rail



ER-SP-ECO
Splice for ECO Rail

Component list



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



EZ-GC-ST
Grounding Clip



EZ-GL-ST
Grounding Lug

3.3 Applicable Klip-lok Interfaces

Component list



ER-I-34
Universal Klip-lok
Interface



ER-I-09
Klip-lok Interface 700



ER-I-32/AU
Klip-lok Interface 406



ER-I-29/AU
SolarRoof, Klip-lok Interface
for longline 305

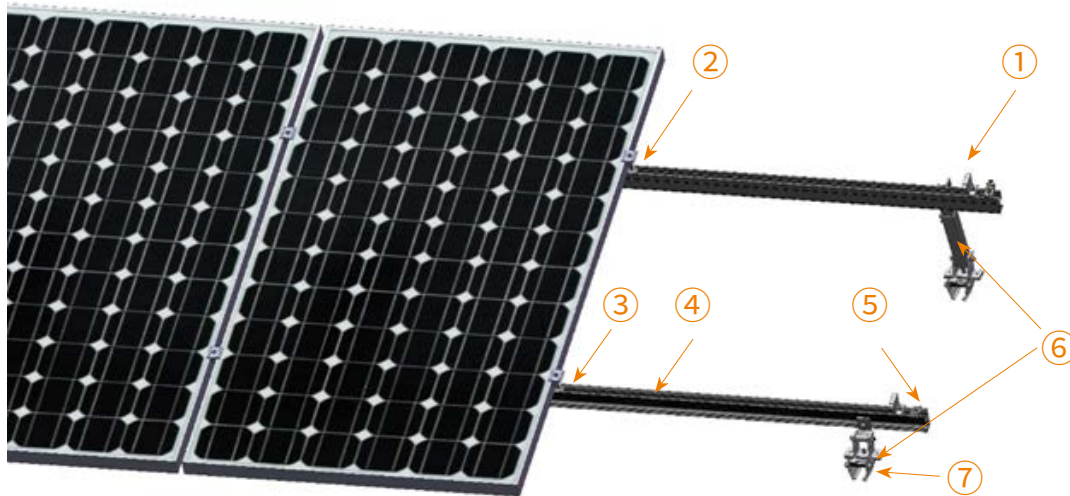
System Overview

4. System Overview

4.1 Overview of Non-Penetrative with Tilt Legs

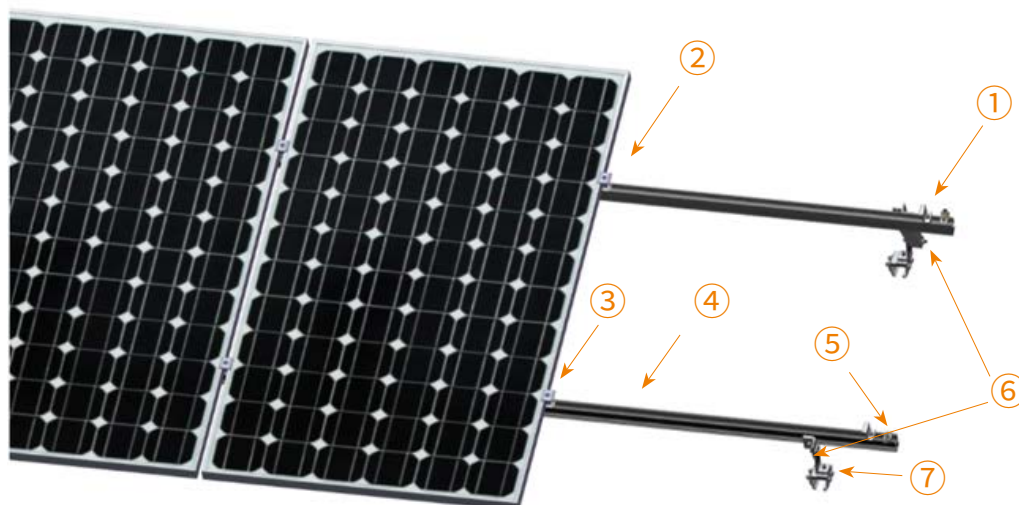
It takes universal Klip-lok interface (ER-I-34) as an example for system overview below.

4.1.1 with Adjustable Tilt Legs



- ① End Clamp ② Inter Clamp ③ Grounding Clip ④ ECO Rail
⑤ Grounding Lug ⑥ Adjustable Tilt Legs ⑦ Universal Klip-lok Interface

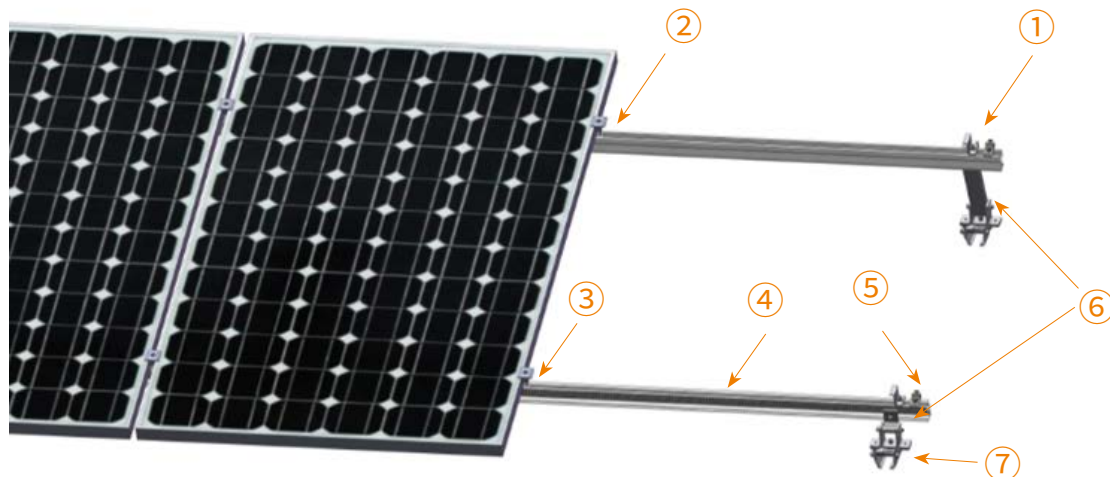
4.1.2 with Adjustable Tilt Legs with L-feet



- ① End Clamp ② Inter Clamp ③ Grounding Clip ④ ECO Rail
⑤ Grounding Lug ⑥ Adjustable Tilt Legs ⑦ Universal Klip-lok Interface

System Overview

4.1.3 with Fixed Tilt Leg



- ① End Clamp ② Inter Clamp ③ Grounding Clip ④ ECO Rail
⑤ Grounding Lug ⑥ Fixed Tilt Leg ⑦ Universal Klip-lok Interface

4.2 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.

4.2.1 General installation instructions:

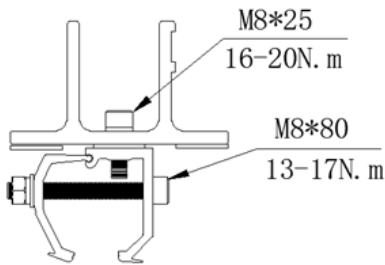
- (1) Apply force to fasteners in the direction of thread
- (2) Apply force uniformly, to maintain the required torque
- (3) Professional tools and tool belts are recommended
- (4) In some cases, fasteners could be seized over time. As an option, if want to avoid galling or seizing of thread, apply lubricant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

4.2.2 Safe Torques

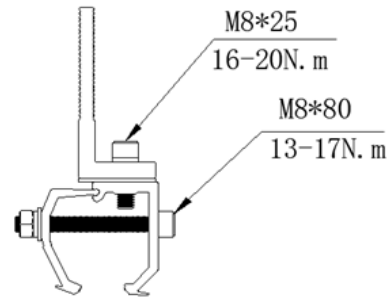
Please refer to safe torques defined in this guide as shown in the figures below. If power tools are required, Clenergy recommends the use of low speed only. High speed and impact drivers increase the risk of bolt galling (deadlock). If deadlock occurs and you need to cut fasteners, please make sure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

System Overview

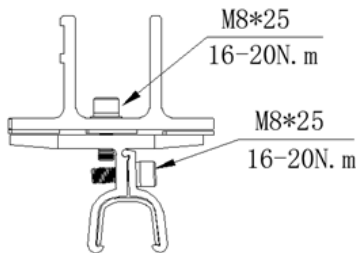
① Klip-lok Interface



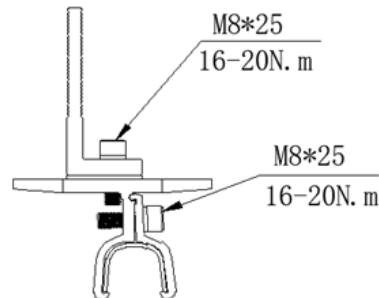
ER-I-34 with Tilt Legs



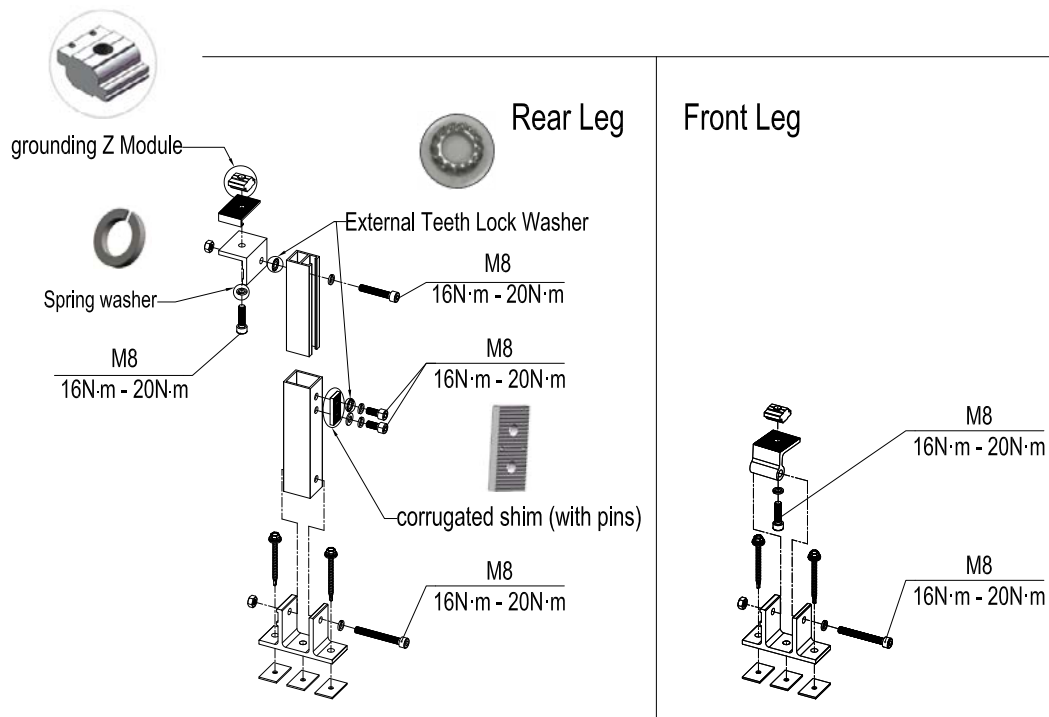
ER-I-34 with L feet Tilt Legs



ER-I-09 (or ER-I-32/AU, or ER-I-29/AU) with Tilt legs and L feet Tilt Legs



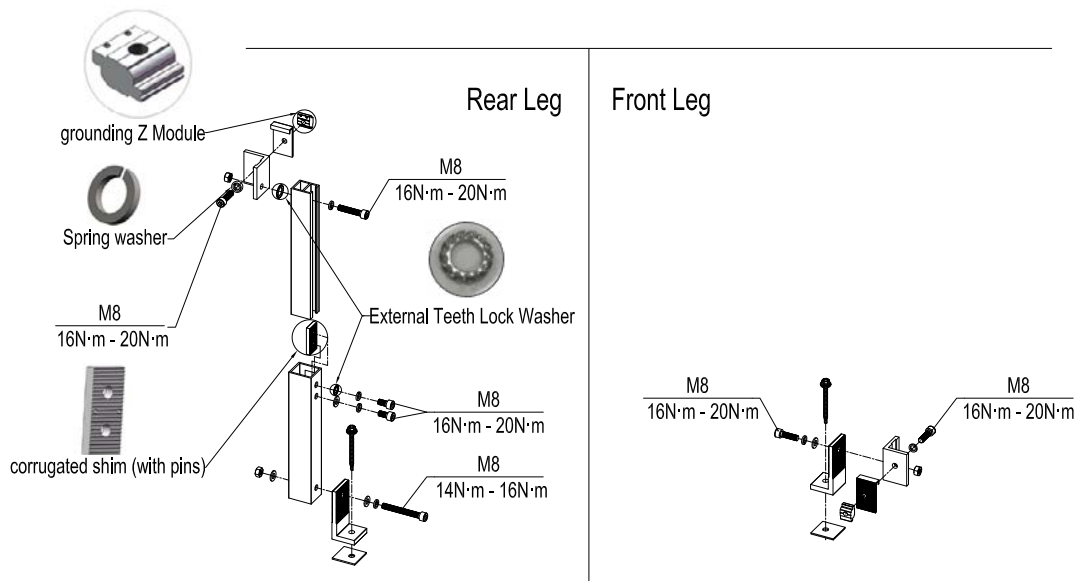
② Adjustable Tilt Legs



System Overview

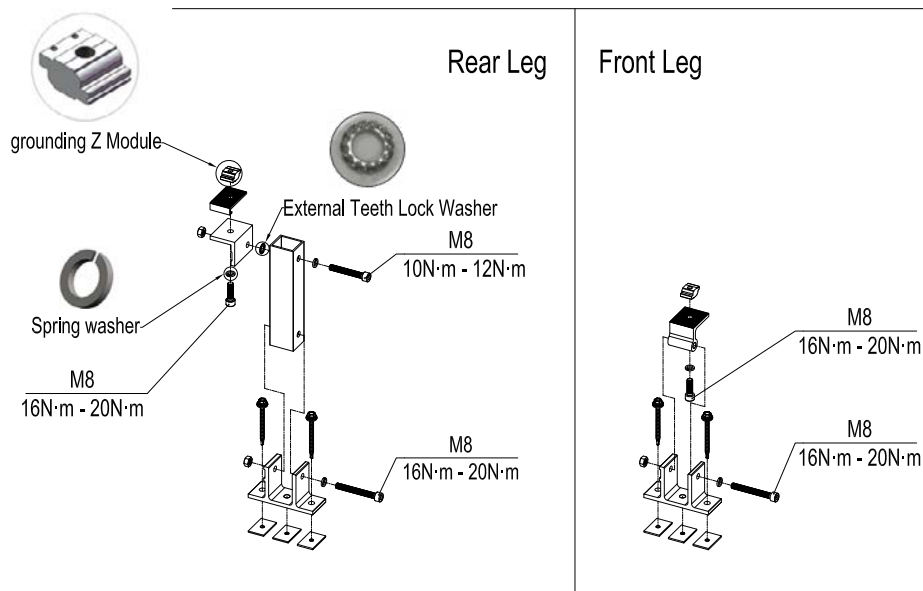
Note: Grounding Z Module, External Teeth Lock Washers, Spring washer and corrugated shim (with pins) on the diagram above are to create the electrical continuity between rail and rear leg tubes.

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.

5. Installation Instruction

5.1 Klip-lok Interface Installation

5.1.1 Universal Klip-lok Interface Installation

According to your plan, fix the Universal Klip-lok Interface on the ribs of metal sheet. Fasten the bolts of the Universal Klip-lok Interface within 16-20N·m after adjusted properly.

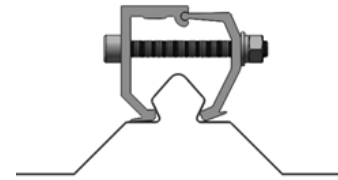


Figure 1

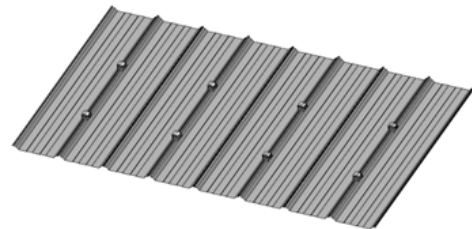


Figure 2

5.1.2 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 figure on the right.

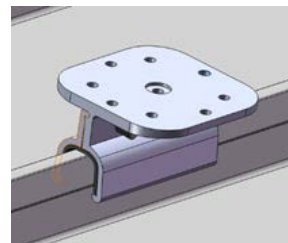


Figure 3

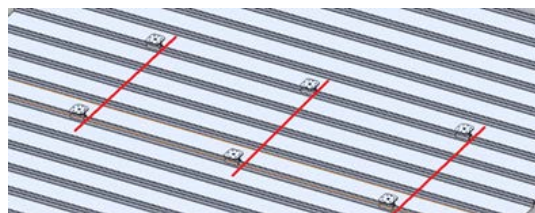


Figure 4

Installation Instruction

5.2 Front & Rear Leg Installation

5.2.1 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 and 6. Tin foot front leg installation is in Figure 7 and 8.

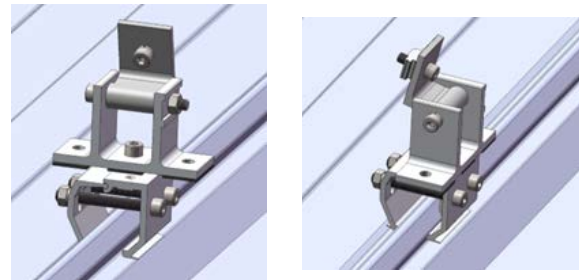


Figure 5 Front Leg Installation with Universal Klip-lok Interface

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

Front Leg Installation with Other Klip-lok Interface

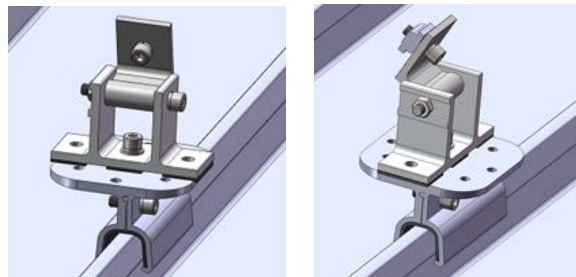


Figure 6

Tin Foot Front Leg Installation with Universal Klip-lok Interface

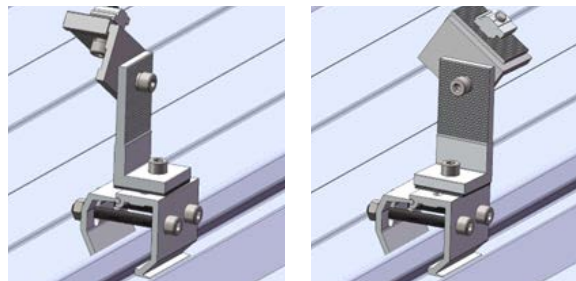


Figure 7

Tin Foot Front Leg Installation with Other Klip-lok Interface

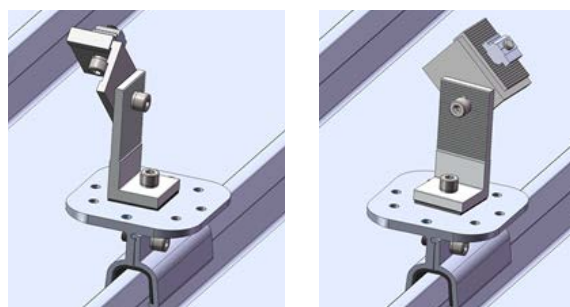


Figure 8

Installation Instruction

5.2.2 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 9.

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

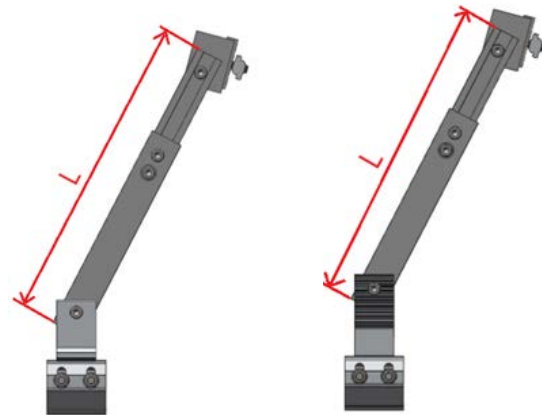
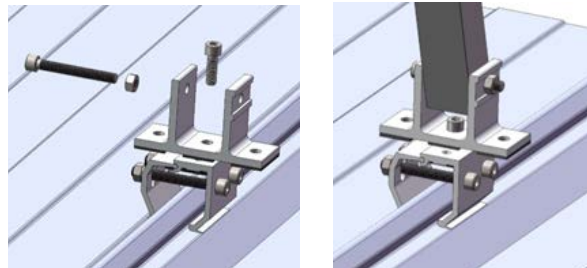


Figure 9

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.



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 10-14.

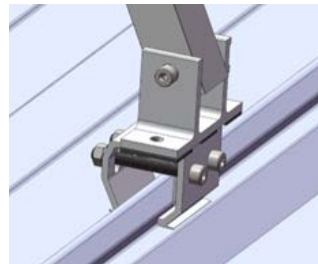


Figure 10 Non-preassembly Rear Leg Installation with Universal Klip-lok Interface

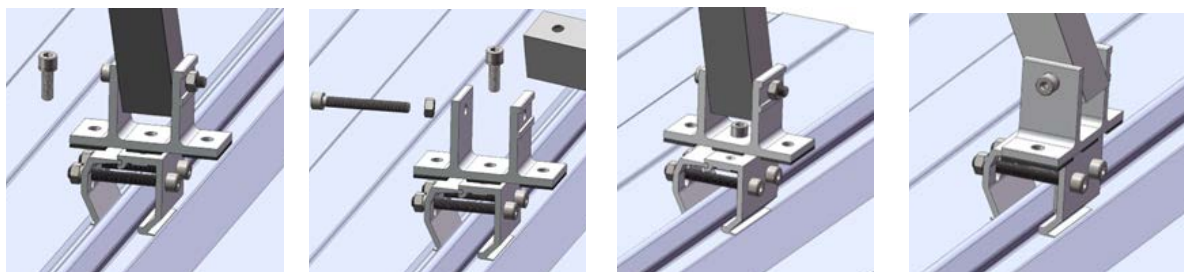


Figure 11 Preassembly Rear Leg Installation with Universal Klip-lok Interface

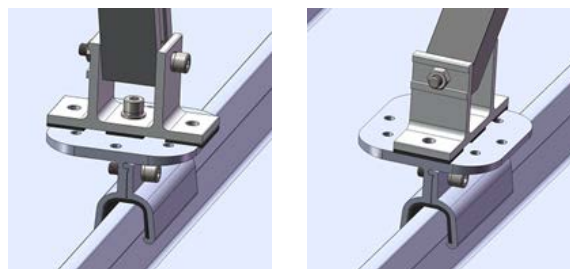


Figure 12 Rear Leg Installation with Other Klip-lok Interface

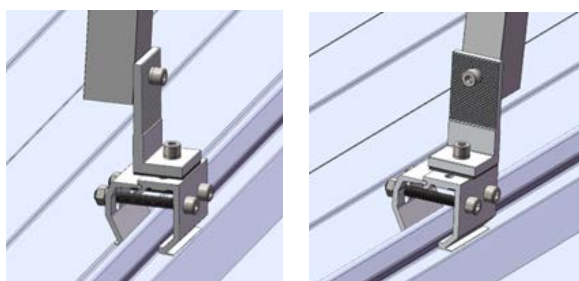


Figure 13 Tin Foot Rear Leg Installation with Universal Klip-lok Interface

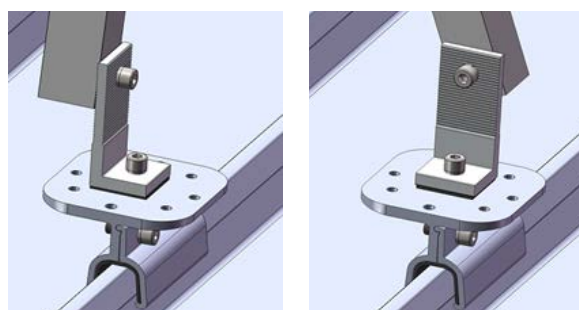


Figure 14 Tin Foot Rear Leg Installation with Other Klip-lok Interface

5.2.3 Install the remaining Front and Rear Legs in Figure 15.

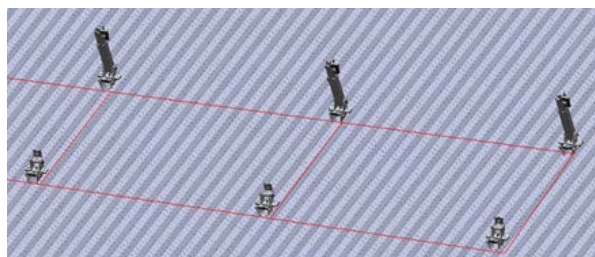


Figure 15

Installation Instruction

5.3 Rail Installation

5.3.1 According to the installation plan, determine the mounting position of Rail. To connect several Rails together, slide half of the splice into the rear side of the Rail. Fasten the first M8 Bolt using an Allen key, and slide the next Rail into the Splice as shown in Figure 16 and 17. Tighten the second M8 Bolt using an Allen key. The total Rail length is recommended not to be over 30 meters considering Rails thermal expansion problem. Splice provides the electrical connection between the 2 rails through the pressure bolts. This eliminates the need of using 2 earthing lugs.

Recommended torque for M8 bolts is 10~12 N·m

5.3.2 After confirming the position of Rail, fasten the Front and Rear Leg, as shown in Figure 18, 19 and 20.

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

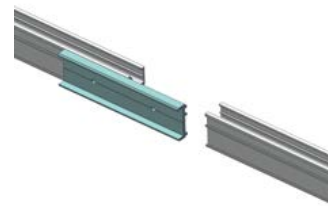


Figure 16

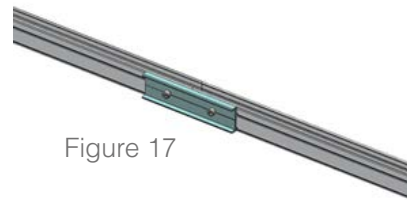


Figure 17

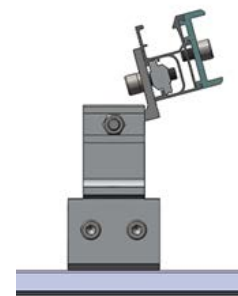


Figure 18

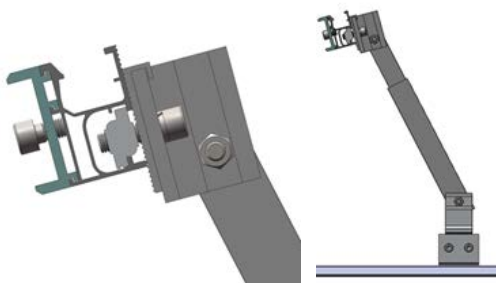


Figure 19

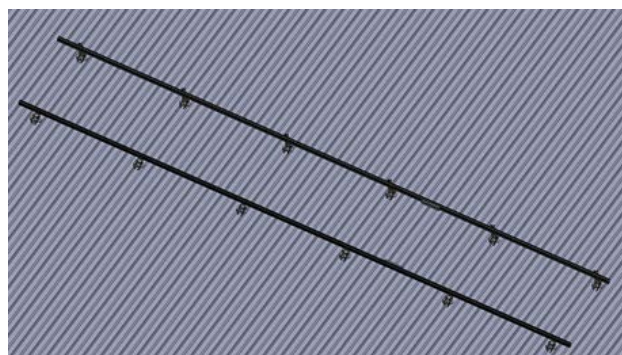


Figure 20

5.4 PV Module Installation

5.4.1 Deployment of Grounding Clips

1) When there is an even number of PV Module in each row: Install the grounding clips at the positions marked X in the Figure shown. Then the number of Grounding Clips = number of PV Module. Eg: 4 grounding clips as shown in Figure 21.

2) When there is an odd number of PV Module in each row: Install grounding clips at positions marked X in Figure shown. Then the number of Grounding Clips = number of PV Module + 1. Eg: 6 grounding clips as shown in Figure 22.

Important Notes:

- When replacing defective PV Modules, it is required to replace the grounding clips under the defective PV Modules.
- When removing defective PV Modules, it is required to keep sufficient grounding clips to maintain all other PV modules' earthing continuity with the rail. It is required to install grounding clips under end clamps when necessary to achieve this.

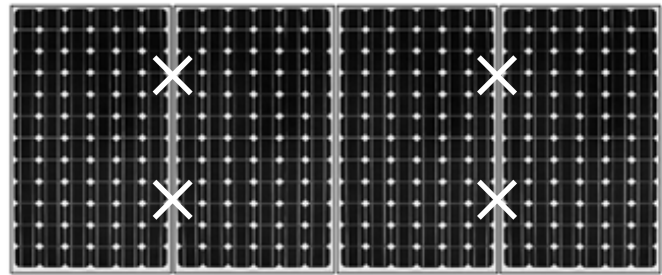


Figure 21

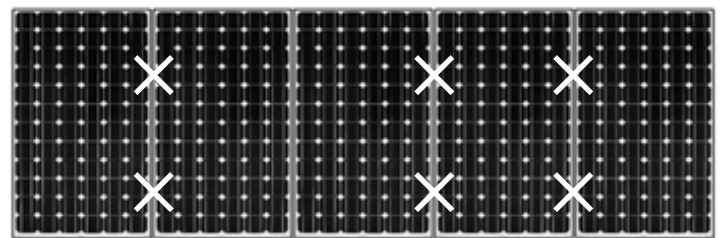


Figure 22

5.4.2 Before installing the PV modules on horizontal rail installations, add anti-slip protection to the lowest row of PV modules. To do this, fasten M6 x 20 mm bolts (with the shank downwards) to the lower mounting holes of the PV module frame. When installing large modules (e.g. ASE250) M8 x 20 mm bolts must be used.

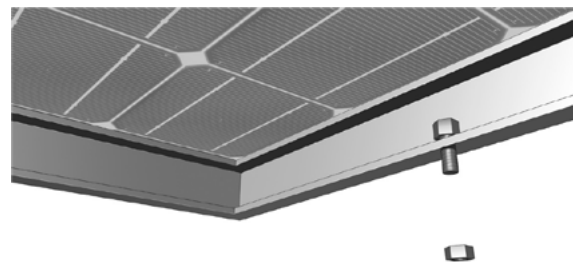


Figure 23

5.4.3 Place the PV Modules on to the rails and fix with End Clamps, Inter Clamps or Universal Clamps. Fasten with the Allen key. Please use Solution 1 or 2 below according to your project.

-Solution 1 (Apply Standard Clamps)

Step 1 Place the first PV Module on the Rail according to your plan, and fix it in place using the End Clamps. Then fasten lightly with the Allen Key as shown in Figure 24.

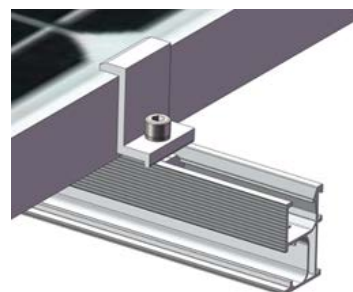


Figure 24

Installation Instruction

Step 2 Slightly lift the PV Module and slide Inter Clamps and Grounding Clips into position. The teeth on Grounding Clip will automatically align when the Inter Clamp is properly installed as shown in Figure 25.

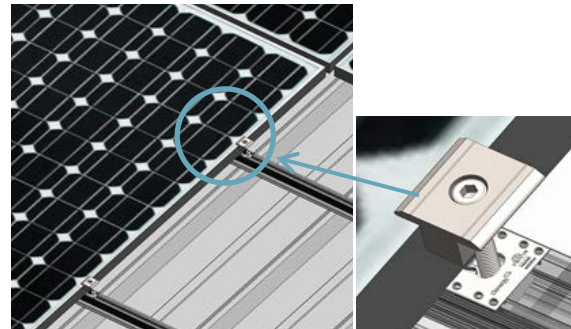


Figure 25

Step 3 Loosely place the next framed PV Module into the other side of the Inter Clamp and Grounding Clip as shown in Figure 26.

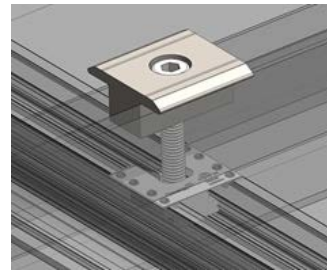


Figure 26

Important Notes:

-To fix the Grounding Clip properly, ensure the frames of PV Modules are completely pressed against the Inter Clamps and Grounding Clips. Visually check that Grounding Clips are positioned properly.

-Grounding Clips are intended for SINGLE USE ONLY! Only fasten the bolts down when the position of the PV Module is finalized. (Only slightly tighten bolts to keep PV Modules in place prior to the final check)

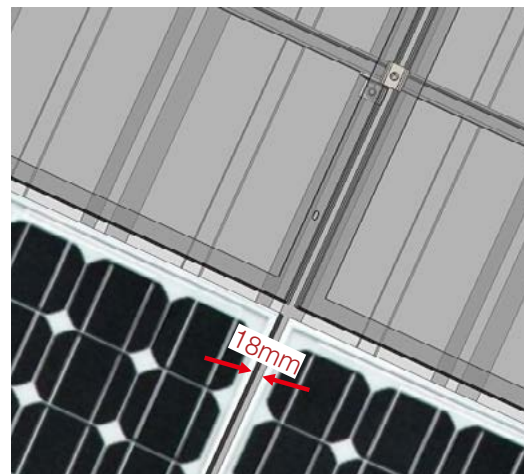


Figure 27

Installation Instruction

-Solution 2 (Apply Universal Clamps)

Step 1 Twisting the head of the Universal Clamp changes the functionality from End to Inter Clamp as shown in Figure 28.

NOTE: Please ensure the Universal Clamp C-U/30/46 or Universal Clamp with Grounding Clip C-U/30/46-G is positioned correctly according to 5.4.1 Deployment of Grounding Clip.

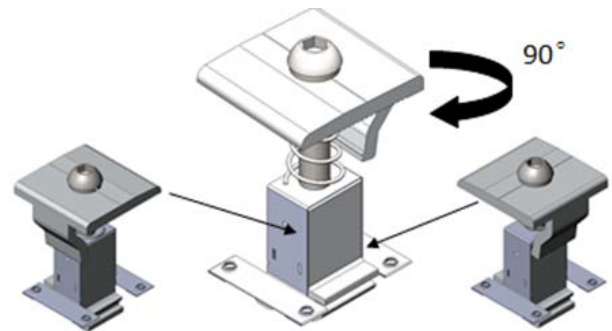


Figure 28

Step 2 Incline the Universal Clamp to fit the lower channel against the lower channel of the Rail, and press the Universal Clamp down towards the other side to securely fit the upper channel against the upper rail channel, as shown in Figure 29.

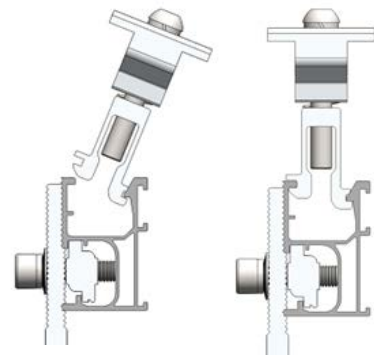


Figure 29

Note: Before installation, make sure there is enough clearance between the screw and lower module of Universal Clamp as shown in Figure 30.

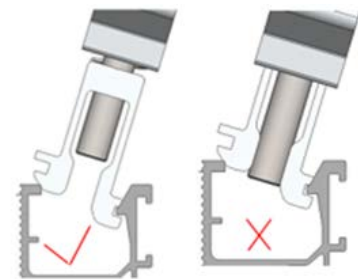


Figure 30

Step 3 Place the first PV Module on the Rails and apply the Universal Clamp in the End Clamp position and fasten slightly with the Allen Key. Make sure the frame of the PV Module is fully in contact with the Universal Clamp as shown in Figure 31. Visually check the Universal Clamp and PV module are properly installed as shown in Figure 32.

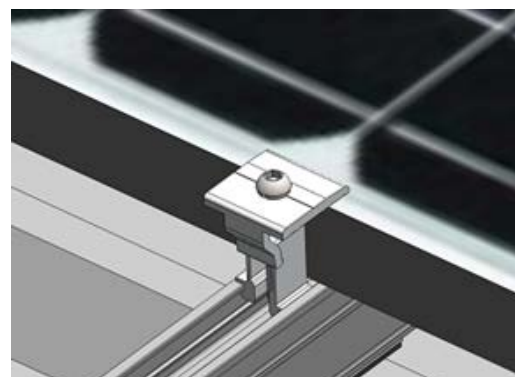


Figure 31

Installation Instruction

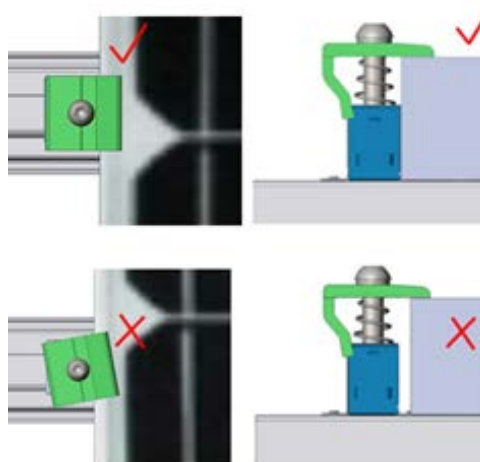


Figure 32

Step 4 When using as an Inter Clamp, click the Universal Clamp into the rail channel and slightly lift the framed PV Module to ensure the Grounding Clip is fully covered as shown in Figure 33.

Step 5 Loosely place the next framed PV Module into the other side of the Universal Clamp. Ensure the Grounding Clip is fully covered and ensure the frame of the PV Module is in close contact with Universal Clamp.

Step 6 Repeat steps above to install all PV Modules. Visually check the Universal Clamps and PV modules are properly positioned and then fasten all Clamps.

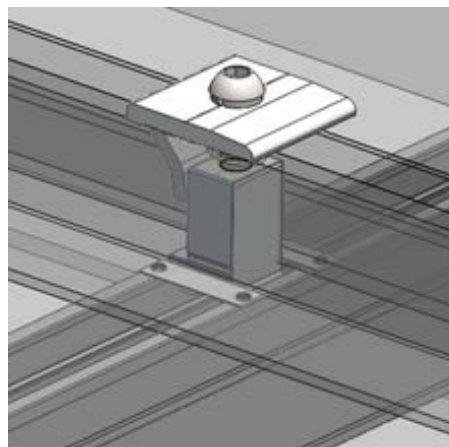


Figure 33

When you using Universal Clamps, the gap between two adjacent PV Modules is 20mm.

The recommend torque for Universal Clamps in the End Clamp position is 13~14N·m.

The recommend torque for Universal Clamps in the Inter Clamp position is 16~20N·m.

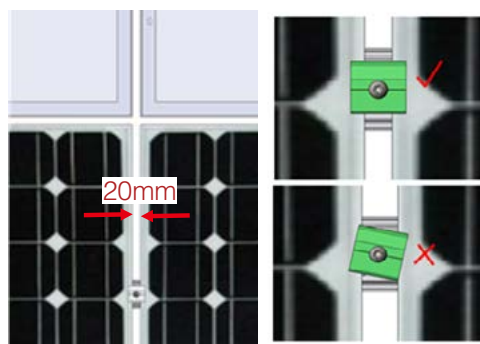


Figure 34

5.4.4 Install the remaining PV modules according to the steps above.

5.4.5 Fasten the bolts in the Front and Rear Legs after installed all the PV modules. Torque for M8 bolts please refer to 4.2.3 Safe Torques.

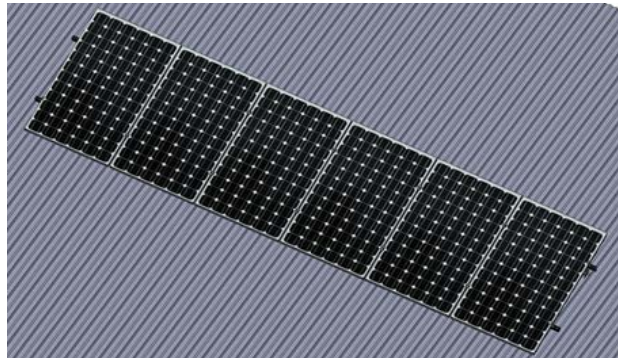


Figure 35

5.4.6 Apply one pre-assembled Grounding Lug per Rail. Slide the Grounding Lug into to the rail channel and fasten the bolt M8*25 with 16~20 N·m. Strip earthing cable (the maximum size is 10 mm²) and insert the conductor into the provided copper tube. Place the copper tube into the channel of Grounding Lug and tighten M6*10 with 5~6 N·m to ensure the earthing cable is tight.

Note: Check the electrical resistance between rail and earthing cable conductor to ensure the bonding is made.

There are three solutions for Grounding Lug installation:

- Solution 1

Fix the Grounding Lug into the top channel of Rail as shown in Figure 36

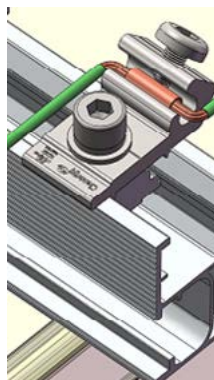


Figure 36

Installation Instruction

- Solution 2

Fix the Grounding Lug into the top channel of Rail where just under the PV Module as shown in Figure 37

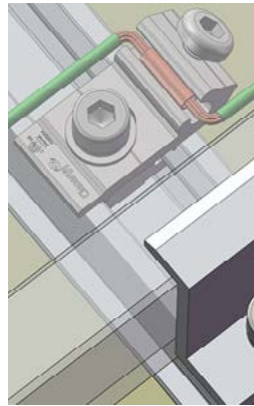


Figure 37

- Solution 3

Fix the Grounding Lug at the side channel of Rail as shown in Figure 38



Figure 38

Certification Letter and Interface Spacing Table



30 August 2020

Clenergy Australia
1/10 Duerdin Street
Clayton, VIC 3168

CERTIFICATION LETTER

Clenergy PV-ezRack SolarRoof Klip-lok tilt interface certification – TC2, 2.5, 3 – Wind Region A, B, C.
Internal REF: **00263**. Project REF: **CL-406-S-REV1**.

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 1170.2-2011 AMDT 4-2016**
 - o **Wind Terrain Category 2, 2.5 and 3**
 - o **Wind average recurrence of 200 years**
 - o **Wind Region A, B, and C**
- **Solar panel length up to 2.2 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- 2011 AMDT 4-2016 | 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,

Alberto Escobar
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BRP EC 46542
RPEQ 18759
info@mwengineering.melbourne

STRUCTURAL DESIGN CERTIFICATION

PV-ezRack^R SolarRoof Klip-lok Tilt interface spacing tables according to AS/NZS 1170.2:2011 Amdt 4-2016

Within Australia

Terrain Category 2, 2.5 & 3

Client: Clenergy Australia

REF: 00263

Date: AUG 2020

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REF: 00263

Client: Clenergy Australia

Internal reference: CL-406-S – REV I

Project: PV-ezRack SolarRoof Klip-lok 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 1252.2:2016

AS/NZS 1664.1:1997-Amdt 1:1999

General Principles

Imposed loadings

Wind Loadings

Bolting

Aluminium

Wind Terrain Category: 2, 2.5 & 3

Wind average recurrence: 200 years

Designed: SM

Date: AUG 2020

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.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.09	0.73	0.55	0.36	0.99	0.66	0.50	0.33

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.32	0.88	0.66	0.44	1.20	0.80	0.60	0.40	0.97	0.65	0.49	0.32	0.90	0.60	0.45	0.30

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44
1.33	0.89	0.67	0.44	1.15	0.76	0.57	0.38	1.05	0.70	0.53	0.35	0.87	0.58	0.44	0.29	0.82	0.55	0.41	0.27

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.26	0.84	0.63	0.42	1.15	0.76	0.57	0.38
1.11	0.74	0.55	0.37	1.11	0.74	0.55	0.37	0.98	0.66	0.49	0.33	0.78	0.52	0.39	0.26	0.69	0.46	0.35	0.23

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.51	1.01	0.76	0.50	1.47	0.98	0.74	0.49	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.32	0.88	0.66	0.44	1.20	0.80	0.60	0.40	1.12	0.75	0.56	0.37	1.04	0.69	0.52	0.35
1.02	0.68	0.51	0.34	0.94	0.63	0.47	0.31	0.85	0.57	0.43	0.28	0.68	0.45	0.34	0.23	0.61	0.41	0.31	0.20

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.58	1.05	0.79	0.53	1.48	0.99	0.74	0.49	1.43	0.95	0.72	0.48	1.41	0.94	0.70	0.47	1.29	0.86	0.65	0.43
1.33	0.89	0.67	0.44	1.15	0.76	0.57	0.38	1.05	0.70	0.53	0.35	1.01	0.67	0.50	0.34	0.95	0.63	0.47	0.32
0.95	0.63	0.47	0.32	0.80	0.53	0.40	0.27	0.72	0.48	0.36	0.24	0.59	0.39	0.29	0.20	0.54	0.36	0.27	0.18

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
3																			
≤ 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
1.54	1.02	0.77	0.51	1.54	1.02	0.77	0.51	1.46	0.98	0.73	0.49	1.34	0.90	0.67	0.45	1.18	0.78	0.59	0.39
1.17	0.78	0.58	0.39	1.17	0.78	0.58	0.39	1.05	0.70	0.52	0.35	0.95	0.64	0.48	0.32	0.86	0.57	0.43	0.29
0.83	0.55	0.42	0.28	0.83	0.55	0.42	0.28	0.73	0.49	0.37	0.24	0.57	0.38	0.28	0.19	0.49	0.33	0.25	0.16

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
2.5																			
≤ 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
1.49	0.99	0.74	0.50	1.41	0.94	0.70	0.47	1.28	0.85	0.64	0.43	1.20	0.80	0.60	0.40	1.07	0.71	0.53	0.36
1.08	0.72	0.54	0.36	1.00	0.67	0.50	0.33	0.91	0.61	0.45	0.30	0.85	0.56	0.42	0.28	0.78	0.52	0.39	0.26
0.76	0.51	0.38	0.25	0.69	0.46	0.35	0.23	0.61	0.41	0.30	0.20	0.49	0.32	0.24	0.16	0.44	0.29	0.22	0.15

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
2																			
≤ 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
1.42	0.94	0.71	0.47	1.22	0.82	0.61	0.41	1.13	0.75	0.56	0.38	1.08	0.72	0.54	0.36	0.98	0.65	0.49	0.33
1.01	0.67	0.50	0.34	0.86	0.57	0.43	0.29	0.79	0.53	0.40	0.26	0.75	0.50	0.38	0.25	0.70	0.47	0.35	0.23
0.70	0.47	0.35	0.23	0.57	0.38	0.28	0.19	0.52	0.34	0.26	0.17	0.42	0.28	0.21	0.14	0.39	0.26	0.19	0.13

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
3																			
≤ 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
1.23	0.82	0.62	0.41	1.23	0.82	0.62	0.41	1.10	0.74	0.55	0.37	1.01	0.67	0.50	0.34	0.87	0.58	0.43	0.29
0.87	0.58	0.43	0.29	0.87	0.58	0.43	0.29	0.75	0.50	0.37	0.25	0.66	0.44	0.33	0.22	0.58	0.38	0.29	0.19
0.55	0.37	0.28	0.18	0.55	0.37	0.28	0.18	0.48	0.32	0.24	0.16	0.37	0.24	0.18	0.12	0.33	0.22	0.16	0.11

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2.5																			
≤ 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
1.14	0.76	0.57	0.38	1.06	0.70	0.53	0.35	0.95	0.63	0.48	0.32	0.89	0.59	0.44	0.30	0.77	0.51	0.38	0.26
0.78	0.52	0.39	0.26	0.70	0.47	0.35	0.23	0.62	0.41	0.31	0.21	0.57	0.38	0.28	0.19	0.51	0.34	0.25	0.17
0.50	0.33	0.25	0.17	0.45	0.30	0.22	0.15	0.40	0.27	0.20	0.13	0.32	0.21	0.16	0.11	0.29	0.19	0.14	0.10

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2																			
≤ 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
1.06	0.71	0.53	0.35	0.90	0.60	0.45	0.30	0.82	0.54	0.41	0.27	0.77	0.51	0.38	0.26	0.68	0.46	0.34	0.23
0.71	0.47	0.35	0.24	0.58	0.38	0.29	0.19	0.52	0.35	0.26	0.17	0.49	0.33	0.25	0.16	0.45	0.30	0.23	0.15
0.45	0.30	0.23	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.27	0.18	0.14	0.09	0.25	0.17	0.13	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
3																			
≤ 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
0.95	0.63	0.48	0.32	0.95	0.63	0.48	0.32	0.82	0.54	0.41	0.27	0.72	0.48	0.36	0.24	0.61	0.41	0.30	0.20
0.60	0.40	0.30	0.20	0.60	0.40	0.30	0.20	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15	0.41	0.27	0.20	0.14
0.39	0.26	0.20	0.13	0.39	0.26	0.20	0.13	0.34	0.23	0.17	0.11	0.26	0.17	0.13	0.09	0.23	0.15	0.11	0.08

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2.5																			
≤ 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
0.86	0.57	0.43	0.29	0.77	0.51	0.38	0.26	0.67	0.45	0.34	0.22	0.62	0.41	0.31	0.21	0.54	0.36	0.27	0.18
0.55	0.36	0.27	0.18	0.49	0.33	0.25	0.16	0.43	0.29	0.22	0.14	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12
0.35	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.23	0.15	0.11	0.08	0.21	0.14	0.10	0.07

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2																			
≤ 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
0.78	0.52	0.39	0.26	0.63	0.42	0.32	0.21	0.57	0.38	0.28	0.19	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16
0.49	0.33	0.25	0.16	0.41	0.27	0.20	0.14	0.37	0.25	0.18	0.12	0.35	0.23	0.17	0.12	0.32	0.22	0.16	0.11
0.32	0.22	0.16	0.11	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
3																			
≤ 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
0.69	0.46	0.34	0.23	0.69	0.46	0.34	0.23	0.59	0.39	0.30	0.20	0.53	0.35	0.26	0.18	0.45	0.30	0.22	0.15
0.44	0.29	0.22	0.15	0.44	0.29	0.22	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.30	0.20	0.15	0.10
0.28	0.19	0.14	0.09	0.28	0.19	0.14	0.09	0.25	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.17	0.11	0.08	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.62	0.41	0.31	0.21	0.56	0.37	0.28	0.19	0.49	0.33	0.24	0.16	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13
0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09
0.26	0.17	0.13	0.09	0.23	0.15	0.12	0.08	0.21	0.14	0.10	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.08	0.05

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2																			
≤ 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
0.56	0.37	0.28	0.19	0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14	0.39	0.26	0.20	0.13	0.35	0.23	0.17	0.12
0.36	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.25	0.17	0.13	0.08	0.24	0.16	0.12	0.08
0.24	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06	0.15	0.10	0.07	0.05	0.13	0.09	0.07	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 700 HI-STRENGTH

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
2.20	1.47	1.10	0.73	2.20	1.47	1.10	0.73	2.10	1.40	1.05	0.70	2.03	1.35	1.01	0.68	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.09	0.73	0.55	0.36

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
2.14	1.42	1.07	0.71	2.06	1.38	1.03	0.69	1.98	1.32	0.99	0.66	1.93	1.28	0.96	0.64	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.28	0.86	0.64	0.43	1.09	0.72	0.54	0.36	1.05	0.70	0.53	0.35

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
2.07	1.38	1.04	0.69	1.95	1.30	0.97	0.65	1.88	1.25	0.94	0.63	1.85	1.23	0.92	0.62	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.35	0.90	0.67	0.45
1.35	0.90	0.67	0.45	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.04	0.69	0.52	0.35	1.01	0.68	0.51	0.34

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
3																			
≤ 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
1.91	1.27	0.95	0.64	1.91	1.27	0.95	0.64	1.82	1.21	0.91	0.61	1.75	1.17	0.88	0.58	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.31	0.87	0.65	0.44	1.25	0.84	0.63	0.42
1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	0.98	0.65	0.49	0.33	0.87	0.58	0.44	0.29

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2.5																			
≤ 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
1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.72	1.15	0.86	0.57	1.67	1.12	0.84	0.56	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.28	0.86	0.64	0.43	1.25	0.83	0.62	0.42	1.21	0.81	0.60	0.40
1.20	0.80	0.60	0.40	1.16	0.77	0.58	0.39	1.07	0.71	0.53	0.36	0.85	0.57	0.43	0.28	0.77	0.51	0.38	0.26

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2																			
≤ 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
1.79	1.19	0.90	0.60	1.68	1.12	0.84	0.56	1.63	1.08	0.81	0.54	1.60	1.07	0.80	0.53	1.32	0.88	0.66	0.44
1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.22	0.81	0.61	0.41	1.19	0.79	0.60	0.40	1.16	0.77	0.58	0.39
1.16	0.77	0.58	0.39	1.01	0.67	0.50	0.34	0.91	0.61	0.45	0.30	0.74	0.49	0.37	0.25	0.68	0.45	0.34	0.23

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.75	1.16	0.87	0.58	1.75	1.16	0.87	0.58	1.66	1.11	0.83	0.55	1.61	1.07	0.80	0.54	1.31	0.87	0.65	0.44
1.30	0.87	0.65	0.43	1.30	0.87	0.65	0.43	1.25	0.83	0.62	0.42	1.20	0.80	0.60	0.40	1.08	0.72	0.54	0.36
1.04	0.69	0.52	0.35	1.04	0.69	0.52	0.35	0.92	0.62	0.46	0.31	0.71	0.47	0.35	0.24	0.62	0.41	0.31	0.21

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.69	1.13	0.85	0.56	1.64	1.09	0.82	0.55	1.57	1.05	0.79	0.52	1.54	1.02	0.77	0.51	1.25	0.84	0.63	0.42
1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.14	0.76	0.57	0.38	1.06	0.71	0.53	0.35	0.98	0.65	0.49	0.33
0.96	0.64	0.48	0.32	0.87	0.58	0.43	0.29	0.76	0.51	0.38	0.25	0.61	0.40	0.30	0.20	0.55	0.36	0.27	0.18

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.65	1.10	0.82	0.55	1.55	1.03	0.77	0.52	1.49	0.99	0.75	0.50	1.46	0.98	0.73	0.49	1.21	0.81	0.60	0.40
1.22	0.82	0.61	0.41	1.08	0.72	0.54	0.36	0.99	0.66	0.50	0.33	0.95	0.63	0.47	0.32	0.88	0.58	0.44	0.29
0.88	0.58	0.44	0.29	0.72	0.48	0.36	0.24	0.65	0.43	0.32	0.22	0.53	0.35	0.26	0.18	0.49	0.32	0.24	0.16

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.56	1.04	0.78	0.52	1.56	1.04	0.78	0.52	1.49	0.99	0.75	0.50	1.44	0.96	0.72	0.48	1.10	0.73	0.55	0.37
1.09	0.73	0.55	0.36	1.09	0.73	0.55	0.36	0.93	0.62	0.47	0.31	0.83	0.55	0.42	0.28	0.72	0.48	0.36	0.24
0.69	0.46	0.35	0.23	0.69	0.46	0.35	0.23	0.60	0.40	0.30	0.20	0.46	0.31	0.23	0.15	0.41	0.27	0.20	0.14

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
1.52	1.01	0.76	0.51	1.46	0.98	0.73	0.49	1.36	0.91	0.68	0.45	1.27	0.85	0.64	0.42	0.97	0.65	0.48	0.32
0.98	0.66	0.49	0.33	0.88	0.58	0.44	0.29	0.78	0.52	0.39	0.26	0.71	0.47	0.35	0.24	0.64	0.43	0.32	0.21
0.63	0.42	0.32	0.21	0.56	0.37	0.28	0.19	0.50	0.33	0.25	0.17	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
1.47	0.98	0.74	0.49	1.30	0.87	0.65	0.43	1.16	0.78	0.58	0.39	1.09	0.73	0.55	0.36	0.85	0.57	0.43	0.28
0.89	0.59	0.45	0.30	0.72	0.48	0.36	0.24	0.65	0.44	0.33	0.22	0.62	0.41	0.31	0.21	0.57	0.38	0.28	0.19
0.57	0.38	0.28	0.19	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.35	0.23	0.17	0.12	0.32	0.21	0.16	0.11

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
1.35	0.90	0.68	0.45	1.35	0.90	0.68	0.45	1.16	0.78	0.58	0.39	1.04	0.69	0.52	0.35	0.76	0.51	0.38	0.25
0.76	0.51	0.38	0.25	0.76	0.51	0.38	0.25	0.65	0.44	0.33	0.22	0.58	0.39	0.29	0.19	0.51	0.34	0.25	0.17
0.48	0.32	0.24	0.16	0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14	0.33	0.22	0.16	0.11	0.29	0.19	0.14	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
1.23	0.82	0.61	0.41	1.09	0.73	0.55	0.36	0.96	0.64	0.48	0.32	0.88	0.59	0.44	0.29	0.68	0.45	0.34	0.23
0.68	0.46	0.34	0.23	0.62	0.41	0.31	0.21	0.55	0.36	0.27	0.18	0.50	0.33	0.25	0.17	0.45	0.30	0.23	0.15
0.45	0.30	0.22	0.15	0.40	0.27	0.20	0.13	0.35	0.24	0.18	0.12	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
1.11	0.74	0.55	0.37	0.90	0.60	0.45	0.30	0.81	0.54	0.40	0.27	0.76	0.51	0.38	0.25	0.60	0.40	0.30	0.20
0.62	0.42	0.31	0.21	0.51	0.34	0.25	0.17	0.46	0.31	0.23	0.15	0.44	0.29	0.22	0.15	0.40	0.27	0.20	0.13
0.40	0.27	0.20	0.13	0.33	0.22	0.17	0.11	0.30	0.20	0.15	0.10	0.25	0.16	0.12	0.08	0.23	0.15	0.11	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.98	0.65	0.49	0.33	0.98	0.65	0.49	0.33	0.85	0.56	0.42	0.28	0.75	0.50	0.37	0.25	0.55	0.37	0.28	0.18
0.55	0.37	0.28	0.18	0.55	0.37	0.28	0.18	0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13
0.36	0.24	0.18	0.12	0.36	0.24	0.18	0.12	0.31	0.21	0.15	0.10	0.24	0.16	0.12	0.08	0.21	0.14	0.11	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.88	0.59	0.44	0.29	0.79	0.53	0.40	0.26	0.70	0.47	0.35	0.23	0.65	0.43	0.32	0.22	0.49	0.33	0.25	0.16
0.50	0.33	0.25	0.17	0.45	0.30	0.22	0.15	0.40	0.27	0.20	0.13	0.37	0.25	0.18	0.12	0.33	0.22	0.17	0.11
0.32	0.22	0.16	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09	0.21	0.14	0.10	0.07	0.19	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.80	0.53	0.40	0.27	0.65	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.56	0.38	0.28	0.19	0.44	0.29	0.22	0.15
0.45	0.30	0.23	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.32	0.22	0.16	0.11	0.30	0.20	0.15	0.10
0.30	0.20	0.15	0.10	0.25	0.16	0.12	0.08	0.22	0.15	0.11	0.07	0.18	0.12	0.09	0.06	0.17	0.11	0.08	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT KLIP-LOK 406

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
2.10	1.40	1.05	0.70	2.10	1.40	1.05	0.70	2.01	1.34	1.00	0.67	1.94	1.29	0.97	0.65	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.09	0.73	0.55	0.36	0.99	0.66	0.50	0.33

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
2.04	1.36	1.02	0.68	1.97	1.32	0.99	0.66	1.90	1.26	0.95	0.63	1.84	1.23	0.92	0.61	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.32	0.88	0.66	0.44	1.20	0.80	0.60	0.40	0.97	0.65	0.49	0.32	0.90	0.60	0.45	0.30

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.98	1.32	0.99	0.66	1.86	1.24	0.93	0.62	1.80	1.20	0.90	0.60	1.77	1.18	0.88	0.59	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44
1.33	0.89	0.67	0.44	1.15	0.76	0.57	0.38	1.05	0.70	0.53	0.35	0.87	0.58	0.44	0.29	0.82	0.55	0.41	0.27

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
3																			
≤ 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
1.83	1.22	0.91	0.61	1.83	1.22	0.91	0.61	1.74	1.16	0.87	0.58	1.68	1.12	0.84	0.56	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.26	0.84	0.63	0.42	1.15	0.76	0.57	0.38
1.11	0.74	0.55	0.37	1.11	0.74	0.55	0.37	0.98	0.66	0.49	0.33	0.78	0.52	0.39	0.26	0.69	0.46	0.35	0.23

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2.5																			
≤ 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
1.77	1.18	0.88	0.59	1.70	1.14	0.85	0.57	1.64	1.10	0.82	0.55	1.60	1.07	0.80	0.53	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.32	0.88	0.66	0.44	1.20	0.80	0.60	0.40	1.12	0.75	0.56	0.37	1.04	0.69	0.52	0.35
1.02	0.68	0.51	0.34	0.94	0.63	0.47	0.31	0.85	0.57	0.43	0.28	0.68	0.45	0.34	0.23	0.61	0.41	0.31	0.20

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2																			
≤ 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
1.71	1.14	0.86	0.57	1.61	1.07	0.80	0.54	1.56	1.04	0.78	0.52	1.53	1.02	0.77	0.51	1.29	0.86	0.65	0.43
1.33	0.89	0.67	0.44	1.15	0.76	0.57	0.38	1.05	0.70	0.53	0.35	1.01	0.67	0.50	0.34	0.95	0.63	0.47	0.32
0.95	0.63	0.47	0.32	0.80	0.53	0.40	0.27	0.72	0.48	0.36	0.24	0.59	0.39	0.29	0.20	0.54	0.36	0.27	0.18

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
3																			
≤ 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
1.67	1.11	0.83	0.56	1.67	1.11	0.83	0.56	1.59	1.06	0.80	0.53	1.46	0.97	0.73	0.49	1.18	0.78	0.59	0.39
1.17	0.78	0.58	0.39	1.17	0.78	0.58	0.39	1.05	0.70	0.52	0.35	0.95	0.64	0.48	0.32	0.86	0.57	0.43	0.29
0.83	0.55	0.42	0.28	0.83	0.55	0.42	0.28	0.73	0.49	0.37	0.24	0.57	0.38	0.28	0.19	0.49	0.33	0.25	0.16

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.53	1.02	0.77	0.51	1.39	0.93	0.70	0.46	1.30	0.87	0.65	0.43	1.07	0.71	0.53	0.36
1.08	0.72	0.54	0.36	1.00	0.67	0.50	0.33	0.91	0.61	0.45	0.30	0.85	0.56	0.42	0.28	0.78	0.52	0.39	0.26
0.76	0.51	0.38	0.25	0.69	0.46	0.35	0.23	0.61	0.41	0.30	0.20	0.49	0.32	0.24	0.16	0.44	0.29	0.22	0.15

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

15° ≤ α < 20°																			
2																			
≤ 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
1.54	1.03	0.77	0.51	1.33	0.89	0.67	0.44	1.23	0.82	0.61	0.41	1.17	0.78	0.59	0.39	0.98	0.65	0.49	0.33
1.01	0.67	0.50	0.34	0.86	0.57	0.43	0.29	0.79	0.53	0.40	0.26	0.75	0.50	0.38	0.25	0.70	0.47	0.35	0.23
0.70	0.47	0.35	0.23	0.57	0.38	0.28	0.19	0.52	0.34	0.26	0.17	0.42	0.28	0.21	0.14	0.39	0.26	0.19	0.13

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
3																			
≤ 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
1.34	0.89	0.67	0.45	1.34	0.89	0.67	0.45	1.20	0.80	0.60	0.40	1.10	0.73	0.55	0.37	0.87	0.58	0.43	0.29
0.87	0.58	0.43	0.29	0.87	0.58	0.43	0.29	0.75	0.50	0.37	0.25	0.66	0.44	0.33	0.22	0.58	0.38	0.29	0.19
0.55	0.37	0.28	0.18	0.55	0.37	0.28	0.18	0.48	0.32	0.24	0.16	0.37	0.24	0.18	0.12	0.33	0.22	0.16	0.11

WRA

WRB

WRC

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2.5																			
≤ 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
1.24	0.83	0.62	0.41	1.15	0.77	0.57	0.38	1.03	0.69	0.52	0.34	0.97	0.64	0.48	0.32	0.77	0.51	0.38	0.26
0.78	0.52	0.39	0.26	0.70	0.47	0.35	0.23	0.62	0.41	0.31	0.21	0.57	0.38	0.28	0.19	0.51	0.34	0.25	0.17
0.50	0.33	0.25	0.17	0.45	0.30	0.22	0.15	0.40	0.27	0.20	0.13	0.32	0.21	0.16	0.11	0.29	0.19	0.14	0.10

WRA

WRB

WRC

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2																			
≤ 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
1.16	0.77	0.58	0.39	0.98	0.66	0.49	0.33	0.89	0.59	0.44	0.30	0.83	0.56	0.42	0.28	0.68	0.46	0.34	0.23
0.71	0.47	0.35	0.24	0.58	0.38	0.29	0.19	0.52	0.35	0.26	0.17	0.49	0.33	0.25	0.16	0.45	0.30	0.23	0.15
0.45	0.30	0.23	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.27	0.18	0.14	0.09	0.25	0.17	0.13	0.08

WRA

WRB

WRC

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (see Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (see Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
3																			
≤ 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
1.03	0.69	0.52	0.34	1.03	0.69	0.52	0.34	0.89	0.59	0.44	0.30	0.78	0.52	0.39	0.26	0.61	0.41	0.30	0.20
0.60	0.40	0.30	0.20	0.60	0.40	0.30	0.20	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15	0.41	0.27	0.20	0.14
0.39	0.26	0.20	0.13	0.39	0.26	0.20	0.13	0.34	0.23	0.17	0.11	0.26	0.17	0.13	0.09	0.23	0.15	0.11	0.08

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2.5																			
≤ 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
0.93	0.62	0.47	0.31	0.83	0.56	0.42	0.28	0.73	0.49	0.37	0.24	0.67	0.45	0.33	0.22	0.54	0.36	0.27	0.18
0.55	0.36	0.27	0.18	0.49	0.33	0.25	0.16	0.43	0.29	0.22	0.14	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12
0.35	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.23	0.15	0.11	0.08	0.21	0.14	0.10	0.07

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2																			
≤ 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
0.84	0.56	0.42	0.28	0.69	0.46	0.34	0.23	0.62	0.41	0.31	0.21	0.58	0.39	0.29	0.19	0.48	0.32	0.24	0.16
0.49	0.33	0.25	0.16	0.41	0.27	0.20	0.14	0.37	0.25	0.18	0.12	0.35	0.23	0.17	0.12	0.32	0.22	0.16	0.11
0.32	0.22	0.16	0.11	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-32/AU (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
3																			
≤ 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
0.75	0.50	0.37	0.25	0.75	0.50	0.37	0.25	0.64	0.43	0.32	0.21	0.57	0.38	0.29	0.19	0.45	0.30	0.22	0.15
0.44	0.29	0.22	0.15	0.44	0.29	0.22	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.30	0.20	0.15	0.10
0.28	0.19	0.14	0.09	0.28	0.19	0.14	0.09	0.25	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.17	0.11	0.08	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.67	0.45	0.33	0.22	0.61	0.41	0.30	0.20	0.53	0.35	0.27	0.18	0.49	0.32	0.24	0.16	0.39	0.26	0.20	0.13
0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09
0.26	0.17	0.13	0.09	0.23	0.15	0.12	0.08	0.21	0.14	0.10	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.08	0.05

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2																			
≤ 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
0.61	0.41	0.30	0.20	0.50	0.34	0.25	0.17	0.45	0.30	0.23	0.15	0.43	0.28	0.21	0.14	0.35	0.23	0.17	0.12
0.36	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.25	0.17	0.13	0.08	0.24	0.16	0.12	0.08
0.24	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06	0.15	0.10	0.07	0.05	0.13	0.09	0.07	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK ULTRA

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.09	0.73	0.55	0.36

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.28	0.86	0.64	0.43	1.09	0.72	0.54	0.36	1.05	0.70	0.53	0.35

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.35	0.90	0.67	0.45
1.35	0.90	0.67	0.45	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.04	0.69	0.52	0.35	1.01	0.68	0.51	0.34

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK ULTRA (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	10 ≤ α < 15°																			
	3																			
	≤ 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
WRA	1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.42	0.95	0.71	0.47
WRB	1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.31	0.87	0.65	0.44	1.25	0.84	0.63	0.42
WRC	1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	0.99	0.66	0.49	0.33	0.93	0.62	0.47	0.31

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	10 ≤ α < 15°																			
	2.5																			
	≤ 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
WRA	1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.51	1.01	0.76	0.50	1.47	0.98	0.74	0.49	1.37	0.91	0.68	0.46
WRB	1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.28	0.86	0.64	0.43	1.25	0.83	0.62	0.42	1.21	0.81	0.60	0.40
WRC	1.20	0.80	0.60	0.40	1.16	0.77	0.58	0.39	1.12	0.74	0.56	0.37	0.91	0.61	0.46	0.30	0.82	0.55	0.41	0.27

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	10 ≤ α < 15°																			
	2																			
	≤ 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
WRA	1.58	1.05	0.79	0.53	1.48	0.99	0.74	0.49	1.43	0.95	0.72	0.48	1.41	0.94	0.70	0.47	1.32	0.88	0.66	0.44
WRB	1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.22	0.81	0.61	0.41	1.19	0.79	0.60	0.40	1.16	0.77	0.58	0.39
WRC	1.16	0.77	0.58	0.39	1.08	0.72	0.54	0.36	0.97	0.65	0.48	0.32	0.79	0.52	0.39	0.26	0.73	0.49	0.37	0.24

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for **STRAMIT SPEED DECK ULTRA (Cont.)**

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	15° ≤ α < 20°																			
	3																			
	≤ 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
WRA	1.54	1.02	0.77	0.51	1.54	1.02	0.77	0.51	1.46	0.98	0.73	0.49	1.42	0.94	0.71	0.47	1.31	0.87	0.65	0.44
WRB	1.30	0.87	0.65	0.43	1.30	0.87	0.65	0.43	1.25	0.83	0.62	0.42	1.20	0.80	0.60	0.40	1.15	0.77	0.58	0.38
WRC	1.12	0.74	0.56	0.37	1.12	0.74	0.56	0.37	0.98	0.66	0.49	0.33	0.76	0.51	0.38	0.25	0.67	0.44	0.33	0.22

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	15° ≤ α < 20°																			
	2.5																			
	≤ 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
WRA	1.49	0.99	0.74	0.50	1.44	0.96	0.72	0.48	1.38	0.92	0.69	0.46	1.35	0.90	0.68	0.45	1.25	0.84	0.63	0.42
WRB	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.18	0.78	0.59	0.39	1.14	0.76	0.57	0.38	1.05	0.70	0.52	0.35
WRC	1.03	0.69	0.52	0.34	0.93	0.62	0.47	0.31	0.82	0.54	0.41	0.27	0.65	0.44	0.33	0.22	0.59	0.39	0.29	0.20

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	15° ≤ α < 20°																			
	2																			
	≤ 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
WRA	1.45	0.97	0.72	0.48	1.36	0.91	0.68	0.45	1.31	0.87	0.66	0.44	1.29	0.86	0.64	0.43	1.21	0.81	0.60	0.40
WRB	1.22	0.82	0.61	0.41	1.15	0.77	0.58	0.38	1.06	0.71	0.53	0.35	1.02	0.68	0.51	0.34	0.94	0.63	0.47	0.31
WRC	0.94	0.63	0.47	0.31	0.77	0.51	0.38	0.26	0.69	0.46	0.35	0.23	0.57	0.38	0.28	0.19	0.52	0.35	0.26	0.17

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK ULTRA (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	20° ≤ α < 25°																			
	3																			
	≤ 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
WRA	1.38	0.92	0.69	0.46	1.38	0.92	0.69	0.46	1.31	0.87	0.66	0.44	1.26	0.84	0.63	0.42	1.17	0.78	0.58	0.39
WRB	1.16	0.77	0.58	0.39	1.16	0.77	0.58	0.39	1.00	0.67	0.50	0.33	0.88	0.59	0.44	0.29	0.78	0.52	0.39	0.26
WRC	0.75	0.50	0.37	0.25	0.75	0.50	0.37	0.25	0.64	0.43	0.32	0.21	0.49	0.33	0.25	0.16	0.43	0.29	0.22	0.14

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	20° ≤ α < 25°																			
	2.5																			
	≤ 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
WRA	1.34	0.89	0.67	0.45	1.29	0.86	0.64	0.43	1.24	0.83	0.62	0.41	1.20	0.80	0.60	0.40	1.03	0.69	0.52	0.34
WRB	1.05	0.70	0.53	0.35	0.94	0.63	0.47	0.31	0.83	0.55	0.42	0.28	0.76	0.51	0.38	0.25	0.68	0.46	0.34	0.23
WRC	0.67	0.45	0.33	0.22	0.61	0.41	0.30	0.20	0.53	0.35	0.27	0.18	0.43	0.28	0.21	0.14	0.39	0.26	0.19	0.13

ANGLE TO THE HORIZONTAL TC BUILDING HEIGHT (m)	20° ≤ α < 25°																			
	2																			
	≤ 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
WRA	1.30	0.86	0.65	0.43	1.22	0.81	0.61	0.41	1.10	0.73	0.55	0.37	1.03	0.69	0.52	0.34	0.92	0.61	0.46	0.31
WRB	0.95	0.64	0.48	0.32	0.78	0.52	0.39	0.26	0.70	0.47	0.35	0.23	0.66	0.44	0.33	0.22	0.61	0.41	0.30	0.20
WRC	0.61	0.41	0.30	0.20	0.50	0.33	0.25	0.17	0.45	0.30	0.23	0.15	0.37	0.25	0.19	0.12	0.35	0.23	0.17	0.12

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK ULTRA (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
1.26	0.84	0.63	0.42	1.26	0.84	0.63	0.42	1.10	0.73	0.55	0.37	0.98	0.65	0.49	0.33	0.82	0.54	0.41	0.27
0.81	0.54	0.40	0.27	0.81	0.54	0.40	0.27	0.70	0.47	0.35	0.23	0.62	0.42	0.31	0.21	0.55	0.36	0.27	0.18
0.52	0.35	0.26	0.17	0.52	0.35	0.26	0.17	0.45	0.30	0.23	0.15	0.35	0.23	0.17	0.12	0.31	0.20	0.15	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
1.15	0.77	0.58	0.38	1.03	0.69	0.52	0.34	0.91	0.61	0.46	0.30	0.83	0.55	0.42	0.28	0.72	0.48	0.36	0.24
0.73	0.49	0.37	0.24	0.66	0.44	0.33	0.22	0.58	0.39	0.29	0.19	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16
0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13	0.30	0.20	0.15	0.10	0.27	0.18	0.14	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
1.05	0.70	0.52	0.35	0.85	0.57	0.42	0.28	0.77	0.51	0.38	0.26	0.72	0.48	0.36	0.24	0.64	0.43	0.32	0.21
0.67	0.45	0.33	0.22	0.55	0.36	0.27	0.18	0.49	0.33	0.25	0.16	0.47	0.31	0.23	0.16	0.43	0.29	0.22	0.14
0.43	0.29	0.22	0.14	0.35	0.24	0.18	0.12	0.32	0.22	0.16	0.11	0.26	0.17	0.13	0.09	0.25	0.16	0.12	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK ULTRA (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.92	0.61	0.46	0.31	0.92	0.61	0.46	0.31	0.79	0.53	0.40	0.26	0.70	0.47	0.35	0.23	0.59	0.39	0.30	0.20
0.59	0.39	0.30	0.20	0.59	0.39	0.30	0.20	0.51	0.34	0.25	0.17	0.45	0.30	0.23	0.15	0.40	0.27	0.20	0.13
0.38	0.26	0.19	0.13	0.38	0.26	0.19	0.13	0.33	0.22	0.17	0.11	0.26	0.17	0.13	0.09	0.23	0.15	0.11	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.83	0.55	0.42	0.28	0.75	0.50	0.38	0.25	0.66	0.44	0.33	0.22	0.61	0.41	0.30	0.20	0.52	0.35	0.26	0.17
0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14	0.39	0.26	0.20	0.13	0.35	0.24	0.18	0.12
0.35	0.23	0.17	0.12	0.32	0.21	0.16	0.11	0.28	0.18	0.14	0.09	0.22	0.15	0.11	0.07	0.20	0.13	0.10	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.76	0.51	0.38	0.25	0.62	0.41	0.31	0.21	0.56	0.37	0.28	0.19	0.53	0.35	0.26	0.18	0.47	0.31	0.23	0.16
0.48	0.32	0.24	0.16	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.34	0.23	0.17	0.11	0.32	0.21	0.16	0.11
0.32	0.21	0.16	0.11	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

FIELDERS KINGKLIP 700

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.09	0.73	0.55	0.36

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.28	0.86	0.64	0.43	1.09	0.72	0.54	0.36	1.05	0.70	0.53	0.35

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.35	0.90	0.67	0.45
1.35	0.90	0.67	0.45	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.04	0.69	0.52	0.35	1.01	0.68	0.51	0.34

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for FIELDERS KINGKLIP 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.31	0.87	0.65	0.44	1.25	0.84	0.63	0.42
1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	0.99	0.66	0.49	0.33	0.91	0.61	0.46	0.30

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.51	1.01	0.76	0.50	1.47	0.98	0.74	0.49	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.28	0.86	0.64	0.43	1.25	0.83	0.62	0.42	1.21	0.81	0.60	0.40
1.20	0.80	0.60	0.40	1.16	0.77	0.58	0.39	1.12	0.74	0.56	0.37	0.89	0.60	0.45	0.30	0.81	0.54	0.40	0.27

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.58	1.05	0.79	0.53	1.48	0.99	0.74	0.49	1.43	0.95	0.72	0.48	1.41	0.94	0.70	0.47	1.32	0.88	0.66	0.44
1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.22	0.81	0.61	0.41	1.19	0.79	0.60	0.40	1.16	0.77	0.58	0.39
1.16	0.77	0.58	0.39	1.05	0.70	0.53	0.35	0.95	0.63	0.47	0.32	0.77	0.52	0.39	0.26	0.71	0.48	0.36	0.24

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for FIELDERS KINGKLIP 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.54	1.02	0.77	0.51	1.54	1.02	0.77	0.51	1.46	0.98	0.73	0.49	1.42	0.94	0.71	0.47	1.31	0.87	0.65	0.44
1.30	0.87	0.65	0.43	1.30	0.87	0.65	0.43	1.25	0.83	0.62	0.42	1.20	0.80	0.60	0.40	1.13	0.75	0.57	0.38
1.09	0.73	0.55	0.36	1.09	0.73	0.55	0.36	0.97	0.65	0.48	0.32	0.75	0.50	0.37	0.25	0.65	0.44	0.33	0.22

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.49	0.99	0.74	0.50	1.44	0.96	0.72	0.48	1.38	0.92	0.69	0.46	1.35	0.90	0.68	0.45	1.25	0.84	0.63	0.42
1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.18	0.78	0.59	0.39	1.12	0.74	0.56	0.37	1.02	0.68	0.51	0.34
1.01	0.67	0.50	0.34	0.91	0.61	0.45	0.30	0.80	0.53	0.40	0.27	0.64	0.43	0.32	0.21	0.57	0.38	0.29	0.19

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.45	0.97	0.72	0.48	1.36	0.91	0.68	0.45	1.31	0.87	0.66	0.44	1.29	0.86	0.64	0.43	1.21	0.81	0.60	0.40
1.22	0.82	0.61	0.41	1.13	0.75	0.57	0.38	1.05	0.70	0.52	0.35	0.99	0.66	0.50	0.33	0.92	0.62	0.46	0.31
0.92	0.62	0.46	0.31	0.75	0.50	0.38	0.25	0.68	0.45	0.34	0.23	0.55	0.37	0.28	0.18	0.51	0.34	0.26	0.17

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for FIELDERS KINGKLIP 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.38	0.92	0.69	0.46	1.38	0.92	0.69	0.46	1.31	0.87	0.66	0.44	1.26	0.84	0.63	0.42	1.15	0.77	0.58	0.38
1.15	0.76	0.57	0.38	1.15	0.76	0.57	0.38	0.98	0.65	0.49	0.33	0.87	0.58	0.43	0.29	0.76	0.51	0.38	0.25
0.73	0.49	0.37	0.24	0.73	0.49	0.37	0.24	0.63	0.42	0.32	0.21	0.49	0.32	0.24	0.16	0.43	0.28	0.21	0.14

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
1.34	0.89	0.67	0.45	1.29	0.86	0.64	0.43	1.24	0.83	0.62	0.41	1.18	0.78	0.59	0.39	1.02	0.68	0.51	0.34
1.03	0.69	0.52	0.34	0.92	0.62	0.46	0.31	0.82	0.54	0.41	0.27	0.75	0.50	0.37	0.25	0.68	0.45	0.34	0.23
0.66	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.52	0.35	0.26	0.17	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
1.30	0.86	0.65	0.43	1.20	0.80	0.60	0.40	1.08	0.72	0.54	0.36	1.02	0.68	0.51	0.34	0.90	0.60	0.45	0.30
0.93	0.62	0.47	0.31	0.76	0.51	0.38	0.25	0.68	0.46	0.34	0.23	0.65	0.43	0.32	0.22	0.60	0.40	0.30	0.20
0.60	0.40	0.30	0.20	0.49	0.33	0.25	0.16	0.45	0.30	0.22	0.15	0.37	0.24	0.18	0.12	0.34	0.23	0.17	0.11

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for FIELDERS KINGKLIP 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
1.26	0.84	0.63	0.42	1.26	0.84	0.63	0.42	1.07	0.71	0.54	0.36	0.95	0.63	0.48	0.32	0.80	0.53	0.40	0.27
0.79	0.53	0.40	0.26	0.79	0.53	0.40	0.26	0.68	0.46	0.34	0.23	0.61	0.41	0.30	0.20	0.54	0.36	0.27	0.18
0.52	0.34	0.26	0.17	0.52	0.34	0.26	0.17	0.45	0.30	0.22	0.15	0.34	0.23	0.17	0.11	0.30	0.20	0.15	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
1.13	0.75	0.56	0.38	1.01	0.67	0.50	0.34	0.89	0.59	0.44	0.30	0.82	0.54	0.41	0.27	0.71	0.47	0.35	0.24
0.72	0.48	0.36	0.24	0.65	0.43	0.32	0.22	0.57	0.38	0.28	0.19	0.52	0.35	0.26	0.17	0.48	0.32	0.24	0.16
0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12	0.29	0.20	0.15	0.10	0.27	0.18	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
1.02	0.68	0.51	0.34	0.83	0.55	0.42	0.28	0.75	0.50	0.38	0.25	0.70	0.47	0.35	0.23	0.63	0.42	0.32	0.21
0.65	0.44	0.33	0.22	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.45	0.30	0.23	0.15	0.42	0.28	0.21	0.14
0.42	0.28	0.21	0.14	0.35	0.23	0.17	0.12	0.32	0.21	0.16	0.11	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for FIELDERS KINGKLIP 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.90	0.60	0.45	0.30	0.90	0.60	0.45	0.30	0.78	0.52	0.39	0.26	0.70	0.46	0.35	0.23	0.58	0.39	0.29	0.19
0.58	0.38	0.29	0.19	0.58	0.38	0.29	0.19	0.50	0.33	0.25	0.17	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13
0.38	0.25	0.19	0.13	0.38	0.25	0.19	0.13	0.32	0.22	0.16	0.11	0.25	0.17	0.13	0.08	0.22	0.15	0.11	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.82	0.54	0.41	0.27	0.74	0.49	0.37	0.25	0.65	0.43	0.32	0.22	0.59	0.39	0.30	0.20	0.52	0.34	0.26	0.17
0.52	0.35	0.26	0.17	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13	0.35	0.23	0.17	0.12
0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10	0.28	0.18	0.14	0.09	0.22	0.15	0.11	0.07	0.20	0.13	0.10	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.74	0.50	0.37	0.25	0.61	0.41	0.30	0.20	0.55	0.37	0.28	0.18	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15
0.48	0.32	0.24	0.16	0.39	0.26	0.20	0.13	0.35	0.24	0.18	0.12	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10
0.31	0.21	0.15	0.10	0.25	0.17	0.13	0.08	0.23	0.15	0.12	0.08	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

STRATCO TOPDECK 700

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.45	0.97	0.73	0.48	1.33	0.89	0.67	0.44
1.28	0.86	0.64	0.43	1.28	0.86	0.64	0.43	1.16	0.77	0.58	0.39	0.92	0.61	0.46	0.31	0.83	0.56	0.42	0.28

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.51	1.01	0.75	0.50	1.39	0.93	0.70	0.46	1.31	0.87	0.65	0.44	1.22	0.81	0.61	0.41
1.20	0.80	0.60	0.40	1.11	0.74	0.55	0.37	1.02	0.68	0.51	0.34	0.82	0.55	0.41	0.27	0.76	0.51	0.38	0.25

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.48	0.99	0.74	0.49
1.52	1.02	0.76	0.51	1.33	0.89	0.67	0.44	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	1.12	0.75	0.56	0.37
1.12	0.75	0.56	0.37	0.96	0.64	0.48	0.32	0.89	0.59	0.45	0.30	0.73	0.49	0.37	0.24	0.69	0.46	0.35	0.23

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.59	1.06	0.80	0.53	1.47	0.98	0.74	0.49	1.29	0.86	0.65	0.43
1.28	0.86	0.64	0.43	1.28	0.86	0.64	0.43	1.16	0.77	0.58	0.39	1.06	0.71	0.53	0.35	0.96	0.64	0.48	0.32
0.93	0.62	0.47	0.31	0.93	0.62	0.47	0.31	0.83	0.55	0.42	0.28	0.65	0.44	0.33	0.22	0.59	0.39	0.29	0.20

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.53	1.02	0.76	0.51	1.41	0.94	0.70	0.47	1.33	0.89	0.66	0.44	1.18	0.79	0.59	0.39
1.20	0.80	0.60	0.40	1.11	0.74	0.55	0.37	1.02	0.68	0.51	0.34	0.95	0.63	0.47	0.32	0.88	0.58	0.44	0.29
0.86	0.57	0.43	0.29	0.79	0.53	0.40	0.26	0.72	0.48	0.36	0.24	0.57	0.38	0.29	0.19	0.51	0.34	0.26	0.17

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.54	1.03	0.77	0.51	1.34	0.90	0.67	0.45	1.25	0.83	0.62	0.42	1.20	0.80	0.60	0.40	1.09	0.73	0.55	0.36
1.12	0.75	0.56	0.37	0.96	0.64	0.48	0.32	0.89	0.59	0.45	0.30	0.85	0.57	0.43	0.28	0.80	0.53	0.40	0.27
0.80	0.53	0.40	0.27	0.68	0.45	0.34	0.23	0.61	0.41	0.30	0.20	0.49	0.33	0.25	0.16	0.46	0.31	0.23	0.15

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.37	0.91	0.68	0.46	1.37	0.91	0.68	0.46	1.23	0.82	0.62	0.41	1.14	0.76	0.57	0.38	0.99	0.66	0.50	0.33
0.98	0.66	0.49	0.33	0.98	0.66	0.49	0.33	0.88	0.58	0.44	0.29	0.80	0.53	0.40	0.27	0.72	0.48	0.36	0.24
0.70	0.47	0.35	0.23	0.70	0.47	0.35	0.23	0.62	0.41	0.31	0.21	0.47	0.32	0.24	0.16	0.42	0.28	0.21	0.14

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.28	0.85	0.64	0.43	1.18	0.79	0.59	0.39	1.08	0.72	0.54	0.36	1.02	0.68	0.51	0.34	0.90	0.60	0.45	0.30
0.92	0.61	0.46	0.31	0.84	0.56	0.42	0.28	0.76	0.51	0.38	0.25	0.72	0.48	0.36	0.24	0.65	0.44	0.33	0.22
0.65	0.43	0.32	0.22	0.58	0.39	0.29	0.19	0.52	0.34	0.26	0.17	0.41	0.27	0.20	0.14	0.37	0.24	0.18	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.19	0.79	0.60	0.40	1.03	0.69	0.52	0.34	0.95	0.63	0.48	0.32	0.91	0.61	0.46	0.30	0.82	0.55	0.41	0.27
0.85	0.56	0.42	0.28	0.72	0.48	0.36	0.24	0.67	0.45	0.33	0.22	0.63	0.42	0.32	0.21	0.59	0.39	0.30	0.20
0.59	0.39	0.30	0.20	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14	0.35	0.24	0.18	0.12	0.33	0.22	0.16	0.11

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRATCO TOPDECK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.04	0.69	0.52	0.35	1.04	0.69	0.52	0.35	0.93	0.62	0.46	0.31	0.85	0.57	0.42	0.28	0.74	0.49	0.37	0.25
0.73	0.49	0.37	0.24	0.73	0.49	0.37	0.24	0.62	0.42	0.31	0.21	0.55	0.37	0.28	0.18	0.48	0.32	0.24	0.16
0.47	0.31	0.23	0.16	0.47	0.31	0.23	0.16	0.40	0.27	0.20	0.13	0.31	0.21	0.16	0.10	0.27	0.18	0.14	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
0.96	0.64	0.48	0.32	0.89	0.59	0.44	0.30	0.81	0.54	0.40	0.27	0.75	0.50	0.38	0.25	0.65	0.43	0.32	0.22
0.66	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.52	0.35	0.26	0.17	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14
0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.27	0.18	0.13	0.09	0.24	0.16	0.12	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
0.90	0.60	0.45	0.30	0.77	0.51	0.38	0.26	0.69	0.46	0.34	0.23	0.65	0.43	0.32	0.22	0.58	0.38	0.29	0.19
0.60	0.40	0.30	0.20	0.48	0.32	0.24	0.16	0.44	0.29	0.22	0.15	0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13
0.38	0.26	0.19	0.13	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.23	0.16	0.12	0.08	0.21	0.14	0.11	0.07

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.80	0.53	0.40	0.27	0.80	0.53	0.40	0.27	0.69	0.46	0.34	0.23	0.61	0.41	0.30	0.20	0.52	0.34	0.26	0.17
0.51	0.34	0.25	0.17	0.51	0.34	0.25	0.17	0.44	0.29	0.22	0.15	0.39	0.26	0.20	0.13	0.35	0.23	0.17	0.12
0.33	0.22	0.17	0.11	0.33	0.22	0.17	0.11	0.28	0.19	0.14	0.09	0.22	0.15	0.11	0.07	0.19	0.13	0.10	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.72	0.48	0.36	0.24	0.65	0.43	0.32	0.22	0.57	0.38	0.28	0.19	0.52	0.35	0.26	0.17	0.45	0.30	0.23	0.15
0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10
0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.24	0.16	0.12	0.08	0.19	0.12	0.09	0.06	0.17	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.66	0.44	0.33	0.22	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.46	0.30	0.23	0.15	0.40	0.27	0.20	0.13
0.42	0.28	0.21	0.14	0.35	0.23	0.17	0.12	0.31	0.21	0.15	0.10	0.29	0.19	0.15	0.10	0.27	0.18	0.13	0.09
0.27	0.18	0.13	0.09	0.22	0.15	0.11	0.07	0.20	0.13	0.10	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRATCO TOPDECK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.58	0.38	0.29	0.19	0.58	0.38	0.29	0.19	0.50	0.33	0.25	0.17	0.44	0.29	0.22	0.15	0.38	0.25	0.19	0.13
0.37	0.25	0.18	0.12	0.37	0.25	0.18	0.12	0.32	0.22	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08
0.24	0.16	0.12	0.08	0.24	0.16	0.12	0.08	0.21	0.14	0.10	0.07	0.16	0.11	0.08	0.05	0.14	0.09	0.07	0.05

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.52	0.35	0.26	0.17	0.47	0.31	0.24	0.16	0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13	0.33	0.22	0.17	0.11
0.34	0.23	0.17	0.11	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.25	0.16	0.12	0.08	0.22	0.15	0.11	0.07
0.22	0.14	0.11	0.07	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06	0.14	0.09	0.07	0.05	0.13	0.08	0.06	0.04

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.47	0.31	0.24	0.16	0.39	0.26	0.20	0.13	0.35	0.23	0.18	0.12	0.33	0.22	0.16	0.11	0.29	0.19	0.15	0.10
0.31	0.21	0.15	0.10	0.25	0.17	0.13	0.08	0.23	0.15	0.12	0.08	0.22	0.14	0.11	0.07	0.20	0.13	0.10	0.07
0.20	0.13	0.10	0.07	0.16	0.11	0.08	0.05	0.15	0.10	0.07	0.05	0.12	0.08	0.06	0.04	0.11	0.08	0.06	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

LYSAGHT LONGLINE 305

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.51	1.01	0.76	0.50	1.51	1.01	0.76	0.50	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46	1.26	0.84	0.63	0.42
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.36	0.91	0.68	0.45	1.31	0.87	0.65	0.44	1.18	0.79	0.59	0.39
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.03	0.69	0.51	0.34

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.47	0.98	0.73	0.49	1.42	0.95	0.71	0.47	1.36	0.91	0.68	0.45	1.33	0.88	0.66	0.44	1.18	0.79	0.59	0.39
1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.28	0.85	0.64	0.43	1.25	0.83	0.62	0.42	1.13	0.76	0.57	0.38
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.28	0.86	0.64	0.43	1.09	0.72	0.54	0.36	0.99	0.66	0.50	0.33

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.43	0.95	0.71	0.47	1.34	0.89	0.67	0.45	1.29	0.86	0.65	0.43	1.27	0.85	0.63	0.42	1.11	0.74	0.56	0.37
1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.21	0.81	0.61	0.40	1.19	0.80	0.60	0.40	1.05	0.70	0.53	0.35
1.35	0.90	0.67	0.45	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.04	0.69	0.52	0.35	0.91	0.60	0.45	0.30

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.31	0.87	0.66	0.44	1.31	0.87	0.66	0.44	1.25	0.83	0.63	0.42	1.21	0.80	0.60	0.40	1.10	0.72	0.54	0.36
1.23	0.82	0.62	0.41	1.23	0.82	0.62	0.41	1.17	0.78	0.59	0.39	1.13	0.76	0.57	0.38	1.02	0.68	0.51	0.34
1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	0.95	0.64	0.48	0.32	0.80	0.53	0.40	0.27

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.27	0.85	0.63	0.42	1.23	0.82	0.61	0.41	1.18	0.79	0.59	0.39	1.15	0.77	0.58	0.38	1.02	0.68	0.51	0.34
1.19	0.80	0.60	0.40	1.15	0.77	0.58	0.38	1.11	0.74	0.56	0.37	1.08	0.72	0.54	0.36	0.98	0.66	0.49	0.33
1.20	0.80	0.60	0.40	1.15	0.76	0.57	0.38	1.04	0.69	0.52	0.35	0.83	0.55	0.41	0.28	0.70	0.47	0.35	0.23

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.23	0.82	0.62	0.41	1.16	0.77	0.58	0.39	1.12	0.75	0.56	0.37	1.10	0.73	0.55	0.37	0.97	0.65	0.48	0.32
1.16	0.77	0.58	0.39	1.09	0.72	0.54	0.36	1.05	0.70	0.53	0.35	1.03	0.69	0.52	0.34	0.91	0.60	0.45	0.30
1.16	0.77	0.58	0.39	0.98	0.65	0.49	0.33	0.88	0.58	0.44	0.29	0.71	0.48	0.36	0.24	0.59	0.40	0.30	0.20

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.20	0.80	0.60	0.40	1.20	0.80	0.60	0.40	1.14	0.76	0.57	0.38	1.11	0.74	0.55	0.37	1.00	0.67	0.50	0.33
1.13	0.75	0.56	0.38	1.13	0.75	0.56	0.38	1.08	0.72	0.54	0.36	1.01	0.67	0.50	0.34	0.85	0.57	0.43	0.28
1.01	0.67	0.50	0.34	1.01	0.67	0.50	0.34	0.89	0.59	0.45	0.30	0.69	0.46	0.34	0.23	0.56	0.38	0.28	0.19

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.16	0.78	0.58	0.39	1.13	0.75	0.56	0.38	1.08	0.72	0.54	0.36	1.06	0.70	0.53	0.35	0.94	0.62	0.47	0.31
1.09	0.73	0.55	0.36	1.05	0.70	0.53	0.35	0.95	0.64	0.48	0.32	0.89	0.60	0.45	0.30	0.77	0.51	0.39	0.26
0.93	0.62	0.47	0.31	0.84	0.56	0.42	0.28	0.75	0.50	0.37	0.25	0.59	0.40	0.30	0.20	0.50	0.33	0.25	0.17

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.13	0.75	0.57	0.38	1.06	0.71	0.53	0.35	1.03	0.68	0.51	0.34	1.01	0.67	0.50	0.34	0.87	0.58	0.44	0.29
1.06	0.71	0.53	0.35	0.91	0.60	0.45	0.30	0.83	0.56	0.42	0.28	0.79	0.53	0.40	0.26	0.67	0.44	0.33	0.22
0.85	0.57	0.43	0.28	0.69	0.46	0.35	0.23	0.63	0.42	0.32	0.21	0.51	0.34	0.26	0.17	0.43	0.28	0.21	0.14

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT LONGLINE 305 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.08	0.72	0.54	0.36	1.08	0.72	0.54	0.36	1.03	0.68	0.51	0.34	0.96	0.64	0.48	0.32	0.81	0.54	0.41	0.27
0.91	0.61	0.46	0.30	0.91	0.61	0.46	0.30	0.79	0.52	0.39	0.26	0.70	0.47	0.35	0.23	0.58	0.38	0.29	0.19
0.68	0.45	0.34	0.23	0.68	0.45	0.34	0.23	0.58	0.39	0.29	0.19	0.45	0.30	0.22	0.15	0.37	0.25	0.18	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
1.04	0.70	0.52	0.35	1.01	0.67	0.50	0.34	0.91	0.61	0.46	0.30	0.85	0.57	0.43	0.28	0.70	0.47	0.35	0.23
0.83	0.55	0.41	0.28	0.74	0.49	0.37	0.25	0.65	0.44	0.33	0.22	0.60	0.40	0.30	0.20	0.51	0.34	0.25	0.17
0.61	0.41	0.30	0.20	0.55	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.39	0.26	0.19	0.13	0.33	0.22	0.16	0.11

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
1.01	0.68	0.51	0.34	0.86	0.58	0.43	0.29	0.78	0.52	0.39	0.26	0.73	0.49	0.37	0.24	0.61	0.41	0.30	0.20
0.75	0.50	0.37	0.25	0.61	0.41	0.31	0.20	0.55	0.37	0.28	0.18	0.52	0.35	0.26	0.17	0.43	0.29	0.22	0.14
0.55	0.37	0.28	0.18	0.45	0.30	0.23	0.15	0.41	0.27	0.20	0.14	0.33	0.22	0.17	0.11	0.28	0.19	0.14	0.09

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.91	0.60	0.45	0.30	0.91	0.60	0.45	0.30	0.78	0.52	0.39	0.26	0.69	0.46	0.34	0.23	0.56	0.38	0.28	0.19
0.64	0.43	0.32	0.21	0.64	0.43	0.32	0.21	0.55	0.36	0.27	0.18	0.49	0.32	0.24	0.16	0.40	0.27	0.20	0.13
0.48	0.32	0.24	0.16	0.48	0.32	0.24	0.16	0.41	0.27	0.20	0.14	0.32	0.21	0.16	0.11	0.26	0.18	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.82	0.55	0.41	0.27	0.73	0.49	0.37	0.24	0.64	0.43	0.32	0.21	0.59	0.39	0.29	0.20	0.49	0.33	0.24	0.16
0.57	0.38	0.29	0.19	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14	0.36	0.24	0.18	0.12
0.43	0.29	0.22	0.14	0.38	0.26	0.19	0.13	0.35	0.23	0.17	0.12	0.27	0.18	0.14	0.09	0.23	0.15	0.12	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.74	0.49	0.37	0.25	0.60	0.40	0.30	0.20	0.54	0.36	0.27	0.18	0.51	0.34	0.26	0.17	0.43	0.29	0.21	0.14
0.53	0.35	0.26	0.18	0.43	0.28	0.21	0.14	0.39	0.26	0.19	0.13	0.37	0.24	0.18	0.12	0.31	0.20	0.15	0.10
0.39	0.26	0.20	0.13	0.32	0.22	0.16	0.11	0.29	0.19	0.15	0.10	0.24	0.16	0.12	0.08	0.20	0.13	0.10	0.07

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for LYSAGHT LONGLINE 305 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-29 and ER-I-34 (Refer to Note 17 for ER-I-34 reduction factors and Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.66	0.44	0.33	0.22	0.66	0.44	0.33	0.22	0.56	0.38	0.28	0.19	0.50	0.33	0.25	0.17	0.41	0.27	0.21	0.14
0.47	0.31	0.23	0.16	0.47	0.31	0.23	0.16	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.29	0.20	0.15	0.10
0.35	0.23	0.17	0.12	0.35	0.23	0.17	0.12	0.30	0.20	0.15	0.10	0.23	0.16	0.12	0.08	0.19	0.13	0.10	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.59	0.39	0.29	0.20	0.53	0.35	0.27	0.18	0.47	0.31	0.23	0.16	0.43	0.29	0.22	0.14	0.36	0.24	0.18	0.12
0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13	0.33	0.22	0.17	0.11	0.31	0.20	0.15	0.10	0.26	0.18	0.13	0.09
0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.20	0.13	0.10	0.07	0.17	0.11	0.08	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.54	0.36	0.27	0.18	0.44	0.29	0.22	0.15	0.39	0.26	0.20	0.13	0.38	0.25	0.19	0.13	0.31	0.21	0.15	0.10
0.38	0.25	0.19	0.13	0.31	0.21	0.16	0.10	0.29	0.19	0.14	0.10	0.27	0.18	0.13	0.09	0.22	0.15	0.11	0.07
0.28	0.19	0.14	0.09	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.17	0.12	0.09	0.06	0.15	0.10	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

METROLL METLOK 700

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.64	1.09	0.82	0.55
1.63	1.09	0.82	0.54	1.63	1.09	0.82	0.54	1.48	0.99	0.74	0.49	1.37	0.91	0.68	0.46	1.25	0.84	0.63	0.42
1.22	0.81	0.61	0.41	1.22	0.81	0.61	0.41	1.09	0.73	0.55	0.36	0.87	0.58	0.44	0.29	0.79	0.52	0.39	0.26

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.68	1.12	0.84	0.56	1.52	1.01	0.76	0.51
1.53	1.02	0.77	0.51	1.42	0.95	0.71	0.47	1.31	0.87	0.65	0.44	1.24	0.83	0.62	0.41	1.15	0.76	0.57	0.38
1.13	0.75	0.57	0.38	1.05	0.70	0.52	0.35	0.95	0.64	0.48	0.32	0.77	0.52	0.39	0.26	0.72	0.48	0.36	0.24

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.70	1.14	0.85	0.57	1.59	1.06	0.80	0.53	1.54	1.02	0.77	0.51	1.40	0.93	0.70	0.47
1.44	0.96	0.72	0.48	1.25	0.84	0.63	0.42	1.17	0.78	0.58	0.39	1.12	0.74	0.56	0.37	1.05	0.70	0.53	0.35
1.05	0.70	0.53	0.35	0.91	0.61	0.45	0.30	0.84	0.56	0.42	0.28	0.69	0.46	0.35	0.23	0.65	0.44	0.33	0.22

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.66	1.10	0.83	0.55	1.66	1.10	0.83	0.55	1.50	1.00	0.75	0.50	1.39	0.93	0.70	0.46	1.22	0.82	0.61	0.41
1.22	0.81	0.61	0.41	1.22	0.81	0.61	0.41	1.09	0.73	0.55	0.36	1.01	0.67	0.50	0.34	0.91	0.61	0.45	0.30
0.88	0.58	0.44	0.29	0.88	0.58	0.44	0.29	0.78	0.52	0.39	0.26	0.62	0.41	0.31	0.21	0.55	0.37	0.28	0.18

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.55	1.03	0.78	0.52	1.45	0.97	0.72	0.48	1.33	0.89	0.66	0.44	1.26	0.84	0.63	0.42	1.12	0.75	0.56	0.37
1.13	0.75	0.57	0.38	1.05	0.70	0.52	0.35	0.95	0.64	0.48	0.32	0.89	0.59	0.45	0.30	0.83	0.55	0.42	0.28
0.82	0.54	0.41	0.27	0.75	0.50	0.37	0.25	0.68	0.45	0.34	0.23	0.54	0.36	0.27	0.18	0.49	0.32	0.24	0.16

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.46	0.97	0.73	0.49	1.27	0.85	0.64	0.42	1.18	0.79	0.59	0.39	1.13	0.75	0.56	0.38	1.03	0.69	0.52	0.34
1.05	0.70	0.53	0.35	0.91	0.61	0.45	0.30	0.84	0.56	0.42	0.28	0.80	0.53	0.40	0.27	0.75	0.50	0.38	0.25
0.75	0.50	0.38	0.25	0.64	0.43	0.32	0.21	0.57	0.38	0.28	0.19	0.47	0.31	0.23	0.16	0.43	0.29	0.22	0.14

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.30	0.86	0.65	0.43	1.30	0.86	0.65	0.43	1.17	0.78	0.58	0.39	1.07	0.71	0.54	0.36	0.94	0.63	0.47	0.31
0.93	0.62	0.47	0.31	0.93	0.62	0.47	0.31	0.83	0.55	0.42	0.28	0.76	0.51	0.38	0.25	0.68	0.46	0.34	0.23
0.66	0.44	0.33	0.22	0.66	0.44	0.33	0.22	0.58	0.39	0.29	0.19	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.21	0.81	0.60	0.40	1.12	0.75	0.56	0.37	1.02	0.68	0.51	0.34	0.96	0.64	0.48	0.32	0.85	0.57	0.43	0.28
0.86	0.57	0.43	0.29	0.79	0.53	0.40	0.26	0.72	0.48	0.36	0.24	0.67	0.45	0.33	0.22	0.62	0.41	0.31	0.21
0.61	0.41	0.30	0.20	0.55	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.39	0.26	0.19	0.13	0.35	0.23	0.17	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.13	0.75	0.56	0.38	0.98	0.65	0.49	0.33	0.90	0.60	0.45	0.30	0.86	0.57	0.43	0.29	0.78	0.52	0.39	0.26
0.80	0.53	0.40	0.27	0.68	0.46	0.34	0.23	0.63	0.42	0.32	0.21	0.60	0.40	0.30	0.20	0.55	0.37	0.28	0.18
0.55	0.37	0.28	0.18	0.45	0.30	0.23	0.15	0.41	0.27	0.20	0.14	0.33	0.22	0.17	0.11	0.31	0.20	0.15	0.10

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
0.98	0.65	0.49	0.33	0.98	0.65	0.49	0.33	0.87	0.58	0.44	0.29	0.80	0.53	0.40	0.27	0.69	0.46	0.35	0.23
0.69	0.46	0.35	0.23	0.69	0.46	0.35	0.23	0.59	0.39	0.30	0.20	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15
0.44	0.29	0.22	0.15	0.44	0.29	0.22	0.15	0.38	0.25	0.19	0.13	0.29	0.20	0.15	0.10	0.26	0.17	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
0.91	0.61	0.46	0.30	0.84	0.56	0.42	0.28	0.76	0.51	0.38	0.25	0.70	0.47	0.35	0.23	0.61	0.41	0.30	0.20
0.62	0.42	0.31	0.21	0.55	0.37	0.28	0.18	0.49	0.33	0.25	0.16	0.45	0.30	0.23	0.15	0.41	0.27	0.20	0.14
0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.25	0.17	0.13	0.08	0.23	0.15	0.11	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
0.85	0.57	0.42	0.28	0.72	0.48	0.36	0.24	0.65	0.43	0.32	0.22	0.61	0.41	0.30	0.20	0.55	0.36	0.27	0.18
0.56	0.37	0.28	0.19	0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14	0.39	0.26	0.20	0.13	0.36	0.24	0.18	0.12
0.36	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.22	0.15	0.11	0.07	0.21	0.14	0.10	0.07

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.76	0.51	0.38	0.25	0.76	0.51	0.38	0.25	0.65	0.43	0.32	0.22	0.58	0.38	0.29	0.19	0.48	0.32	0.24	0.16
0.48	0.32	0.24	0.16	0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12	0.32	0.22	0.16	0.11
0.31	0.21	0.15	0.10	0.31	0.21	0.15	0.10	0.27	0.18	0.13	0.09	0.21	0.14	0.10	0.07	0.18	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.68	0.45	0.34	0.23	0.61	0.41	0.30	0.20	0.54	0.36	0.27	0.18	0.50	0.33	0.25	0.17	0.43	0.29	0.22	0.14
0.43	0.29	0.22	0.14	0.39	0.26	0.20	0.13	0.35	0.23	0.17	0.12	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09
0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.22	0.15	0.11	0.07	0.18	0.12	0.09	0.06	0.16	0.11	0.08	0.05

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.62	0.41	0.31	0.21	0.50	0.34	0.25	0.17	0.46	0.30	0.23	0.15	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13
0.39	0.26	0.20	0.13	0.32	0.22	0.16	0.11	0.29	0.19	0.15	0.10	0.28	0.18	0.14	0.09	0.25	0.17	0.13	0.08
0.25	0.17	0.13	0.08	0.21	0.14	0.10	0.07	0.19	0.13	0.10	0.06	0.16	0.11	0.08	0.05	0.15	0.10	0.07	0.05

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
3																			
≤ 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
0.54	0.36	0.27	0.18	0.54	0.36	0.27	0.18	0.47	0.31	0.24	0.16	0.42	0.28	0.21	0.14	0.35	0.24	0.18	0.12
0.35	0.24	0.18	0.12	0.35	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.24	0.16	0.12	0.08
0.23	0.15	0.12	0.08	0.23	0.15	0.12	0.08	0.20	0.13	0.10	0.07	0.15	0.10	0.08	0.05	0.13	0.09	0.07	0.04

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.50	0.33	0.25	0.17	0.44	0.29	0.22	0.15	0.39	0.26	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.21	0.16	0.11
0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.23	0.15	0.12	0.08	0.21	0.14	0.10	0.07
0.21	0.14	0.10	0.07	0.18	0.12	0.09	0.06	0.17	0.11	0.08	0.06	0.13	0.09	0.07	0.04	0.12	0.08	0.06	0.04

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2																			
≤ 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
0.45	0.30	0.22	0.15	0.37	0.25	0.18	0.12	0.33	0.22	0.16	0.11	0.31	0.21	0.16	0.10	0.28	0.18	0.14	0.09
0.29	0.19	0.15	0.10	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.20	0.13	0.10	0.07	0.19	0.13	0.10	0.06
0.19	0.13	0.10	0.06	0.15	0.10	0.08	0.05	0.14	0.09	0.07	0.05	0.11	0.08	0.06	0.04	0.11	0.07	0.05	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

STRAMIT SPEED DECK 500

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.42	0.95	0.71	0.47
1.38	0.92	0.69	0.46	1.38	0.92	0.69	0.46	1.24	0.83	0.62	0.41	0.99	0.66	0.49	0.33	0.89	0.60	0.45	0.30

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.40	0.93	0.70	0.47	1.30	0.87	0.65	0.43
1.28	0.86	0.64	0.43	1.18	0.79	0.59	0.39	1.08	0.72	0.54	0.36	0.88	0.59	0.44	0.29	0.81	0.54	0.41	0.27

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.42	0.95	0.71	0.47	1.32	0.88	0.66	0.44	1.26	0.84	0.63	0.42	1.19	0.79	0.60	0.40
1.19	0.79	0.60	0.40	1.03	0.69	0.52	0.34	0.95	0.64	0.48	0.32	0.79	0.52	0.39	0.26	0.74	0.49	0.37	0.25

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.38	0.92	0.69	0.46
1.38	0.92	0.69	0.46	1.38	0.92	0.69	0.46	1.24	0.83	0.62	0.41	1.14	0.76	0.57	0.38	1.03	0.69	0.52	0.34
0.99	0.66	0.50	0.33	0.99	0.66	0.50	0.33	0.88	0.59	0.44	0.29	0.70	0.47	0.35	0.23	0.63	0.42	0.31	0.21

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.50	1.00	0.75	0.50	1.42	0.94	0.71	0.47	1.27	0.85	0.63	0.42
1.28	0.86	0.64	0.43	1.18	0.79	0.59	0.39	1.08	0.72	0.54	0.36	1.02	0.68	0.51	0.34	0.94	0.63	0.47	0.31
0.92	0.62	0.46	0.31	0.85	0.56	0.42	0.28	0.77	0.51	0.38	0.26	0.61	0.41	0.31	0.20	0.55	0.37	0.28	0.18

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.58	1.05	0.79	0.53	1.44	0.96	0.72	0.48	1.34	0.89	0.67	0.45	1.28	0.85	0.64	0.43	1.16	0.77	0.58	0.39
1.19	0.79	0.60	0.40	1.03	0.69	0.52	0.34	0.95	0.64	0.48	0.32	0.91	0.61	0.45	0.30	0.85	0.57	0.43	0.28
0.85	0.57	0.43	0.28	0.72	0.48	0.36	0.24	0.65	0.43	0.32	0.22	0.53	0.35	0.26	0.18	0.49	0.32	0.24	0.16

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for
STRAMIT SPEED DECK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.46	0.98	0.73	0.49	1.46	0.98	0.73	0.49	1.32	0.88	0.66	0.44	1.22	0.81	0.61	0.41	1.06	0.71	0.53	0.35
1.05	0.70	0.53	0.35	1.05	0.70	0.53	0.35	0.94	0.63	0.47	0.31	0.86	0.57	0.43	0.29	0.78	0.52	0.39	0.26
0.75	0.50	0.37	0.25	0.75	0.50	0.37	0.25	0.66	0.44	0.33	0.22	0.51	0.34	0.25	0.17	0.45	0.30	0.22	0.15

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.37	0.91	0.68	0.46	1.26	0.84	0.63	0.42	1.15	0.77	0.58	0.38	1.08	0.72	0.54	0.36	0.96	0.64	0.48	0.32
0.98	0.65	0.49	0.33	0.90	0.60	0.45	0.30	0.82	0.54	0.41	0.27	0.76	0.51	0.38	0.25	0.70	0.47	0.35	0.23
0.68	0.46	0.34	0.23	0.62	0.42	0.31	0.21	0.55	0.36	0.27	0.18	0.43	0.29	0.22	0.14	0.39	0.26	0.20	0.13

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.27	0.85	0.64	0.42	1.10	0.74	0.55	0.37	1.02	0.68	0.51	0.34	0.97	0.65	0.48	0.32	0.88	0.58	0.44	0.29
0.91	0.61	0.45	0.30	0.78	0.52	0.39	0.26	0.71	0.47	0.35	0.24	0.68	0.45	0.34	0.23	0.63	0.42	0.32	0.21
0.63	0.42	0.32	0.21	0.52	0.34	0.26	0.17	0.46	0.31	0.23	0.15	0.38	0.25	0.19	0.13	0.35	0.24	0.18	0.12

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for
STRAMIT SPEED DECK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.11	0.74	0.56	0.37	1.11	0.74	0.56	0.37	0.99	0.66	0.50	0.33	0.90	0.60	0.45	0.30	0.78	0.52	0.39	0.26
0.78	0.52	0.39	0.26	0.78	0.52	0.39	0.26	0.67	0.45	0.33	0.22	0.59	0.39	0.30	0.20	0.52	0.35	0.26	0.17
0.50	0.33	0.25	0.17	0.50	0.33	0.25	0.17	0.43	0.29	0.22	0.14	0.33	0.22	0.17	0.11	0.29	0.20	0.15	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
1.03	0.69	0.52	0.34	0.94	0.63	0.47	0.31	0.86	0.58	0.43	0.29	0.80	0.53	0.40	0.27	0.69	0.46	0.35	0.23
0.70	0.47	0.35	0.23	0.63	0.42	0.32	0.21	0.55	0.37	0.28	0.18	0.51	0.34	0.25	0.17	0.46	0.31	0.23	0.15
0.45	0.30	0.23	0.15	0.41	0.27	0.20	0.14	0.36	0.24	0.18	0.12	0.29	0.19	0.14	0.10	0.26	0.17	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
0.96	0.64	0.48	0.32	0.82	0.54	0.41	0.27	0.74	0.49	0.37	0.25	0.69	0.46	0.34	0.23	0.62	0.41	0.31	0.21
0.64	0.43	0.32	0.21	0.52	0.35	0.26	0.17	0.47	0.31	0.23	0.16	0.44	0.29	0.22	0.15	0.41	0.27	0.20	0.14
0.41	0.27	0.20	0.14	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10	0.25	0.16	0.12	0.08	0.23	0.16	0.12	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.86	0.57	0.43	0.29	0.86	0.57	0.43	0.29	0.74	0.49	0.37	0.25	0.65	0.43	0.32	0.22	0.55	0.36	0.27	0.18
0.55	0.36	0.27	0.18	0.55	0.36	0.27	0.18	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12
0.35	0.24	0.18	0.12	0.35	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.23	0.16	0.12	0.08	0.21	0.14	0.10	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.77	0.51	0.38	0.26	0.69	0.46	0.34	0.23	0.61	0.41	0.30	0.20	0.56	0.37	0.28	0.19	0.48	0.32	0.24	0.16
0.49	0.33	0.25	0.16	0.44	0.29	0.22	0.15	0.39	0.26	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.22	0.16	0.11
0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.20	0.13	0.10	0.07	0.19	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.70	0.46	0.35	0.23	0.57	0.38	0.28	0.19	0.51	0.34	0.26	0.17	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14
0.45	0.30	0.22	0.15	0.37	0.25	0.18	0.12	0.33	0.22	0.17	0.11	0.32	0.21	0.16	0.11	0.29	0.19	0.15	0.10
0.29	0.19	0.15	0.10	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.18	0.12	0.09	0.06	0.17	0.11	0.08	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for STRAMIT SPEED DECK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.62	0.41	0.31	0.21	0.62	0.41	0.31	0.21	0.53	0.35	0.26	0.18	0.47	0.31	0.24	0.16	0.40	0.27	0.20	0.13
0.39	0.26	0.20	0.13	0.39	0.26	0.20	0.13	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10	0.27	0.18	0.13	0.09
0.25	0.17	0.13	0.08	0.25	0.17	0.13	0.08	0.22	0.15	0.11	0.07	0.17	0.12	0.09	0.06	0.15	0.10	0.08	0.05

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.56	0.37	0.28	0.19	0.50	0.34	0.25	0.17	0.44	0.29	0.22	0.15	0.41	0.27	0.20	0.14	0.35	0.24	0.18	0.12
0.36	0.24	0.18	0.12	0.32	0.22	0.16	0.11	0.28	0.19	0.14	0.09	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08
0.23	0.15	0.12	0.08	0.21	0.14	0.10	0.07	0.18	0.12	0.09	0.06	0.15	0.10	0.07	0.05	0.13	0.09	0.07	0.04

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.50	0.34	0.25	0.17	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13	0.35	0.23	0.18	0.12	0.32	0.21	0.16	0.11
0.32	0.22	0.16	0.11	0.27	0.18	0.13	0.09	0.25	0.16	0.12	0.08	0.23	0.15	0.12	0.08	0.22	0.14	0.11	0.07
0.22	0.14	0.11	0.07	0.18	0.12	0.09	0.06	0.16	0.11	0.08	0.05	0.13	0.09	0.07	0.04	0.12	0.08	0.06	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

REV-KLIP 700

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.03	0.69	0.52	0.34

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.01	0.68	0.51	0.34	0.94	0.63	0.47	0.31

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.35	0.90	0.67	0.45
1.35	0.90	0.67	0.45	1.19	0.79	0.60	0.40	1.10	0.73	0.55	0.37	0.91	0.61	0.46	0.30	0.86	0.57	0.43	0.29

Note: Refer to Note 16 to find out installation exclusion zones.



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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.31	0.87	0.65	0.44	1.19	0.79	0.60	0.40
1.15	0.77	0.58	0.38	1.15	0.77	0.58	0.38	1.02	0.68	0.51	0.34	0.81	0.54	0.41	0.27	0.72	0.48	0.36	0.24

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.51	1.01	0.76	0.50	1.47	0.98	0.74	0.49	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.25	0.84	0.63	0.42	1.18	0.78	0.59	0.39	1.08	0.72	0.54	0.36
1.07	0.71	0.53	0.36	0.98	0.65	0.49	0.33	0.88	0.59	0.44	0.29	0.71	0.47	0.35	0.24	0.63	0.42	0.32	0.21

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2																			
≤ 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
1.58	1.05	0.79	0.53	1.48	0.99	0.74	0.49	1.43	0.95	0.72	0.48	1.41	0.94	0.70	0.47	1.32	0.88	0.66	0.44
1.34	0.89	0.67	0.45	1.19	0.79	0.60	0.40	1.10	0.73	0.55	0.37	1.05	0.70	0.53	0.35	0.99	0.66	0.50	0.33
0.99	0.66	0.50	0.33	0.83	0.55	0.42	0.28	0.75	0.50	0.37	0.25	0.61	0.41	0.31	0.20	0.57	0.38	0.28	0.19

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.54	1.02	0.77	0.51	1.54	1.02	0.77	0.51	1.46	0.98	0.73	0.49	1.41	0.94	0.70	0.47	1.22	0.82	0.61	0.41
1.22	0.81	0.61	0.41	1.22	0.81	0.61	0.41	1.08	0.72	0.54	0.36	0.99	0.66	0.50	0.33	0.89	0.59	0.45	0.30
0.86	0.57	0.43	0.29	0.86	0.57	0.43	0.29	0.76	0.51	0.38	0.25	0.59	0.39	0.29	0.20	0.51	0.34	0.26	0.17

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.49	0.99	0.74	0.50	1.44	0.96	0.72	0.48	1.34	0.89	0.67	0.45	1.26	0.84	0.63	0.42	1.12	0.74	0.56	0.37
1.13	0.75	0.57	0.38	1.04	0.69	0.52	0.35	0.95	0.63	0.47	0.32	0.88	0.58	0.44	0.29	0.81	0.54	0.40	0.27
0.79	0.53	0.40	0.26	0.72	0.48	0.36	0.24	0.63	0.42	0.32	0.21	0.51	0.34	0.25	0.17	0.45	0.30	0.23	0.15

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.45	0.97	0.72	0.48	1.27	0.85	0.64	0.42	1.18	0.78	0.59	0.39	1.13	0.75	0.56	0.38	1.02	0.68	0.51	0.34
1.05	0.70	0.52	0.35	0.89	0.59	0.45	0.30	0.82	0.55	0.41	0.27	0.78	0.52	0.39	0.26	0.73	0.49	0.37	0.24
0.73	0.49	0.37	0.24	0.59	0.39	0.30	0.20	0.54	0.36	0.27	0.18	0.44	0.29	0.22	0.15	0.41	0.27	0.20	0.14

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.28	0.85	0.64	0.43	1.28	0.85	0.64	0.43	1.14	0.76	0.57	0.38	1.05	0.70	0.52	0.35	0.91	0.61	0.45	0.30
0.90	0.60	0.45	0.30	0.90	0.60	0.45	0.30	0.78	0.52	0.39	0.26	0.68	0.46	0.34	0.23	0.60	0.40	0.30	0.20
0.58	0.38	0.29	0.19	0.58	0.38	0.29	0.19	0.50	0.33	0.25	0.17	0.39	0.26	0.19	0.13	0.34	0.23	0.17	0.11

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
1.19	0.79	0.60	0.40	1.10	0.73	0.55	0.37	0.99	0.66	0.50	0.33	0.93	0.62	0.46	0.31	0.80	0.53	0.40	0.27
0.82	0.54	0.41	0.27	0.73	0.49	0.37	0.24	0.65	0.43	0.32	0.22	0.59	0.39	0.30	0.20	0.53	0.35	0.27	0.18
0.52	0.35	0.26	0.17	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.33	0.22	0.17	0.11	0.30	0.20	0.15	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
1.10	0.74	0.55	0.37	0.94	0.63	0.47	0.31	0.85	0.57	0.42	0.28	0.80	0.53	0.40	0.27	0.71	0.47	0.35	0.24
0.74	0.49	0.37	0.25	0.60	0.40	0.30	0.20	0.55	0.36	0.27	0.18	0.51	0.34	0.25	0.17	0.48	0.32	0.24	0.16
0.48	0.32	0.24	0.16	0.39	0.26	0.20	0.13	0.35	0.24	0.18	0.12	0.29	0.19	0.14	0.10	0.27	0.18	0.13	0.09

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.99	0.66	0.50	0.33	0.99	0.66	0.50	0.33	0.85	0.57	0.42	0.28	0.75	0.50	0.38	0.25	0.63	0.42	0.32	0.21
0.63	0.42	0.32	0.21	0.63	0.42	0.32	0.21	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.42	0.28	0.21	0.14
0.41	0.27	0.20	0.14	0.41	0.27	0.20	0.14	0.35	0.24	0.18	0.12	0.27	0.18	0.14	0.09	0.24	0.16	0.12	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.90	0.60	0.45	0.30	0.80	0.53	0.40	0.27	0.70	0.47	0.35	0.23	0.65	0.43	0.32	0.22	0.56	0.37	0.28	0.19
0.57	0.38	0.28	0.19	0.51	0.34	0.25	0.17	0.45	0.30	0.23	0.15	0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13
0.37	0.25	0.18	0.12	0.33	0.22	0.17	0.11	0.29	0.19	0.15	0.10	0.23	0.16	0.12	0.08	0.21	0.14	0.11	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.81	0.54	0.40	0.27	0.66	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.56	0.37	0.28	0.19	0.50	0.33	0.25	0.17
0.52	0.34	0.26	0.17	0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13	0.36	0.24	0.18	0.12	0.34	0.23	0.17	0.11
0.34	0.23	0.17	0.11	0.28	0.18	0.14	0.09	0.25	0.16	0.12	0.08	0.21	0.14	0.10	0.07	0.19	0.12	0.09	0.06

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
3																			
≤ 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
0.71	0.47	0.36	0.24	0.71	0.47	0.36	0.24	0.62	0.41	0.31	0.21	0.54	0.36	0.27	0.18	0.46	0.31	0.23	0.15
0.46	0.31	0.23	0.15	0.46	0.31	0.23	0.15	0.39	0.26	0.20	0.13	0.35	0.24	0.18	0.12	0.31	0.21	0.15	0.10
0.30	0.20	0.15	0.10	0.30	0.20	0.15	0.10	0.26	0.17	0.13	0.09	0.20	0.13	0.10	0.07	0.17	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.65	0.43	0.32	0.22	0.58	0.38	0.29	0.19	0.51	0.34	0.26	0.17	0.47	0.31	0.24	0.16	0.41	0.27	0.20	0.14
0.42	0.28	0.21	0.14	0.38	0.25	0.19	0.13	0.33	0.22	0.17	0.11	0.31	0.21	0.15	0.10	0.28	0.18	0.14	0.09
0.27	0.18	0.13	0.09	0.25	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.17	0.12	0.09	0.06	0.16	0.11	0.08	0.05

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2																			
≤ 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
0.58	0.39	0.29	0.19	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14	0.41	0.27	0.20	0.14	0.36	0.24	0.18	0.12
0.38	0.25	0.19	0.13	0.31	0.21	0.15	0.10	0.28	0.19	0.14	0.09	0.26	0.17	0.13	0.09	0.25	0.16	0.12	0.08
0.25	0.16	0.12	0.08	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06	0.15	0.10	0.08	0.05	0.14	0.09	0.07	0.05

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for

METROLL METLOK 500

Type of Rail	ER-R-ECO (see Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (see Note 19 for other panel sizes)

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
3																			
≤ 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
1.60	1.07	0.80	0.53	1.60	1.07	0.80	0.53	1.47	0.98	0.74	0.49	1.38	0.92	0.69	0.46	1.22	0.82	0.61	0.41
1.22	0.81	0.61	0.41	1.22	0.81	0.61	0.41	1.11	0.74	0.55	0.37	1.03	0.69	0.52	0.34	0.94	0.63	0.47	0.31
0.91	0.61	0.45	0.30	0.91	0.61	0.45	0.30	0.82	0.55	0.41	0.27	0.65	0.44	0.33	0.22	0.59	0.40	0.30	0.20

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2.5																			
≤ 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
1.51	1.01	0.76	0.50	1.42	0.95	0.71	0.47	1.33	0.89	0.66	0.44	1.26	0.84	0.63	0.42	1.13	0.75	0.57	0.38
1.15	0.76	0.57	0.38	1.07	0.71	0.53	0.36	0.98	0.66	0.49	0.33	0.92	0.62	0.46	0.31	0.86	0.57	0.43	0.29
0.85	0.56	0.42	0.28	0.78	0.52	0.39	0.26	0.72	0.48	0.36	0.24	0.58	0.39	0.29	0.19	0.54	0.36	0.27	0.18

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2																			
≤ 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
1.43	0.95	0.72	0.48	1.27	0.85	0.64	0.42	1.19	0.79	0.60	0.40	1.15	0.77	0.58	0.38	1.05	0.70	0.52	0.35
1.08	0.72	0.54	0.36	0.94	0.63	0.47	0.31	0.88	0.58	0.44	0.29	0.84	0.56	0.42	0.28	0.79	0.53	0.40	0.26
0.79	0.53	0.40	0.26	0.68	0.46	0.34	0.23	0.63	0.42	0.32	0.21	0.52	0.35	0.26	0.17	0.49	0.33	0.25	0.16

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.13	0.75	0.56	0.38	1.04	0.69	0.52	0.35	0.92	0.61	0.46	0.31
0.91	0.61	0.45	0.30	0.91	0.61	0.45	0.30	0.82	0.55	0.41	0.27	0.75	0.50	0.38	0.25	0.68	0.46	0.34	0.23
0.66	0.44	0.33	0.22	0.66	0.44	0.33	0.22	0.58	0.39	0.29	0.19	0.47	0.31	0.23	0.16	0.41	0.28	0.21	0.14

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.16	0.77	0.58	0.39	1.08	0.72	0.54	0.36	0.99	0.66	0.50	0.33	0.94	0.62	0.47	0.31	0.84	0.56	0.42	0.28
0.85	0.56	0.42	0.28	0.78	0.52	0.39	0.26	0.72	0.48	0.36	0.24	0.67	0.45	0.33	0.22	0.62	0.42	0.31	0.21
0.61	0.41	0.30	0.20	0.56	0.37	0.28	0.19	0.51	0.34	0.25	0.17	0.41	0.27	0.20	0.14	0.37	0.24	0.18	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.09	0.73	0.54	0.36	0.95	0.63	0.48	0.32	0.89	0.59	0.44	0.30	0.85	0.57	0.42	0.28	0.77	0.51	0.38	0.26
0.79	0.53	0.40	0.26	0.68	0.46	0.34	0.23	0.63	0.42	0.32	0.21	0.60	0.40	0.30	0.20	0.57	0.38	0.28	0.19
0.57	0.38	0.28	0.19	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14	0.35	0.24	0.18	0.12	0.33	0.22	0.16	0.11

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
0.97	0.65	0.48	0.32	0.97	0.65	0.48	0.32	0.87	0.58	0.44	0.29	0.80	0.53	0.40	0.27	0.70	0.47	0.35	0.23
0.70	0.47	0.35	0.23	0.70	0.47	0.35	0.23	0.62	0.42	0.31	0.21	0.57	0.38	0.28	0.19	0.52	0.34	0.26	0.17
0.49	0.33	0.25	0.16	0.49	0.33	0.25	0.16	0.44	0.29	0.22	0.15	0.34	0.23	0.17	0.11	0.29	0.20	0.15	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
0.90	0.60	0.45	0.30	0.84	0.56	0.42	0.28	0.77	0.51	0.38	0.26	0.72	0.48	0.36	0.24	0.64	0.43	0.32	0.21
0.65	0.43	0.32	0.22	0.59	0.39	0.30	0.20	0.54	0.36	0.27	0.18	0.50	0.33	0.25	0.17	0.46	0.31	0.23	0.15
0.45	0.30	0.23	0.15	0.42	0.28	0.21	0.14	0.36	0.24	0.18	0.12	0.29	0.19	0.14	0.10	0.26	0.17	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
0.85	0.57	0.42	0.28	0.73	0.49	0.36	0.24	0.67	0.45	0.34	0.22	0.64	0.43	0.32	0.21	0.58	0.39	0.29	0.19
0.60	0.40	0.30	0.20	0.52	0.34	0.26	0.17	0.47	0.31	0.23	0.16	0.45	0.30	0.22	0.15	0.42	0.28	0.21	0.14
0.42	0.28	0.21	0.14	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10	0.25	0.17	0.13	0.08	0.23	0.16	0.12	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
3																			
≤ 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
0.74	0.49	0.37	0.25	0.74	0.49	0.37	0.25	0.66	0.44	0.33	0.22	0.60	0.40	0.30	0.20	0.52	0.35	0.26	0.17
0.52	0.34	0.26	0.17	0.52	0.34	0.26	0.17	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13	0.35	0.23	0.17	0.12
0.33	0.22	0.17	0.11	0.33	0.22	0.17	0.11	0.28	0.19	0.14	0.09	0.22	0.15	0.11	0.07	0.19	0.13	0.10	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2.5																			
≤ 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
0.68	0.45	0.34	0.23	0.62	0.42	0.31	0.21	0.57	0.38	0.28	0.19	0.53	0.35	0.26	0.18	0.46	0.31	0.23	0.15
0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12	0.34	0.23	0.17	0.11	0.31	0.21	0.15	0.10
0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09	0.24	0.16	0.12	0.08	0.19	0.12	0.09	0.06	0.17	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2																			
≤ 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
0.63	0.42	0.32	0.21	0.54	0.36	0.27	0.18	0.49	0.33	0.24	0.16	0.46	0.30	0.23	0.15	0.41	0.27	0.20	0.14
0.42	0.28	0.21	0.14	0.35	0.23	0.17	0.12	0.31	0.21	0.15	0.10	0.29	0.19	0.15	0.10	0.27	0.18	0.13	0.09
0.27	0.18	0.13	0.09	0.22	0.15	0.11	0.07	0.20	0.13	0.10	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for
METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
3																			
≤ 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
0.57	0.38	0.28	0.19	0.57	0.38	0.28	0.19	0.49	0.33	0.24	0.16	0.43	0.29	0.22	0.14	0.36	0.24	0.18	0.12
0.36	0.24	0.18	0.12	0.36	0.24	0.18	0.12	0.31	0.21	0.15	0.10	0.28	0.18	0.14	0.09	0.25	0.16	0.12	0.08
0.23	0.15	0.12	0.08	0.23	0.15	0.12	0.08	0.20	0.13	0.10	0.07	0.15	0.10	0.08	0.05	0.14	0.09	0.07	0.05

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2.5																			
≤ 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
0.51	0.34	0.26	0.17	0.46	0.30	0.23	0.15	0.40	0.27	0.20	0.13	0.37	0.25	0.18	0.12	0.32	0.22	0.16	0.11
0.32	0.22	0.16	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07
0.21	0.14	0.10	0.07	0.19	0.13	0.10	0.06	0.17	0.11	0.08	0.06	0.13	0.09	0.07	0.04	0.12	0.08	0.06	0.04

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2																			
≤ 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
0.46	0.31	0.23	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09
0.30	0.20	0.15	0.10	0.25	0.16	0.12	0.08	0.22	0.15	0.11	0.07	0.21	0.14	0.10	0.07	0.19	0.13	0.10	0.06
0.19	0.13	0.10	0.06	0.16	0.11	0.08	0.05	0.15	0.10	0.07	0.05	0.12	0.08	0.06	0.04	0.11	0.07	0.05	0.04

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.41	0.27	0.20	0.14	0.41	0.27	0.20	0.14	0.35	0.23	0.18	0.12	0.31	0.21	0.16	0.10	0.26	0.17	0.13	0.09
0.26	0.17	0.13	0.09	0.26	0.17	0.13	0.09	0.23	0.15	0.12	0.08	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06
0.17	0.11	0.08	0.06	0.17	0.11	0.08	0.06	0.15	0.10	0.07	0.05	0.11	0.08	0.06	0.04	0.10	0.07	0.05	0.03

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.37	0.25	0.18	0.12	0.34	0.22	0.17	0.11	0.30	0.20	0.15	0.10	0.27	0.18	0.14	0.09	0.24	0.16	0.12	0.08
0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.19	0.13	0.10	0.06	0.18	0.12	0.09	0.06	0.16	0.11	0.08	0.05
0.15	0.10	0.08	0.05	0.14	0.09	0.07	0.05	0.12	0.08	0.06	0.04	0.10	0.07	0.05	0.03	0.09	0.06	0.05	0.03

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.34	0.22	0.17	0.11	0.27	0.18	0.14	0.09	0.25	0.17	0.12	0.08	0.23	0.15	0.12	0.08	0.21	0.14	0.10	0.07
0.22	0.14	0.11	0.07	0.18	0.12	0.09	0.06	0.16	0.11	0.08	0.05	0.15	0.10	0.08	0.05	0.14	0.09	0.07	0.05
0.14	0.09	0.07	0.05	0.12	0.08	0.06	0.04	0.11	0.07	0.05	0.04	0.09	0.06	0.04	0.03	0.08	0.05	0.04	0.03

Note: Refer to Note 16 to find out installation exclusion zones.

PV-ezRack SolarRoof Interface spacing table for

STEELINE STEEL-RIB 500 (ST28)

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.57	1.05	0.78	0.52	1.51	1.01	0.75	0.50	1.45	0.96	0.72	0.48
1.43	0.95	0.72	0.48	1.43	0.95	0.72	0.48	1.36	0.91	0.68	0.45	1.14	0.76	0.57	0.38	1.09	0.73	0.55	0.36

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.58	1.06	0.79	0.53
1.59	1.06	0.80	0.53	1.54	1.03	0.77	0.51	1.48	0.98	0.74	0.49	1.44	0.96	0.72	0.48	1.39	0.93	0.70	0.46
1.38	0.92	0.69	0.46	1.34	0.89	0.67	0.45	1.28	0.86	0.64	0.43	1.09	0.72	0.54	0.36	1.05	0.70	0.53	0.35

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.66	1.10	0.83	0.55	1.62	1.08	0.81	0.54	1.52	1.02	0.76	0.51
1.55	1.03	0.77	0.52	1.45	0.96	0.72	0.48	1.40	0.93	0.70	0.47	1.38	0.92	0.69	0.46	1.35	0.90	0.67	0.45
1.35	0.90	0.67	0.45	1.26	0.84	0.63	0.42	1.22	0.82	0.61	0.41	1.04	0.69	0.52	0.35	0.99	0.66	0.50	0.33

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.60	1.07	0.80	0.53	1.54	1.03	0.77	0.51	1.42	0.95	0.71	0.47
1.42	0.95	0.71	0.47	1.42	0.95	0.71	0.47	1.35	0.90	0.68	0.45	1.31	0.87	0.65	0.44	1.25	0.84	0.63	0.42
1.24	0.83	0.62	0.41	1.24	0.83	0.62	0.41	1.18	0.79	0.59	0.39	0.94	0.63	0.47	0.31	0.84	0.56	0.42	0.28

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2.5																			
≤ 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
1.62	1.08	0.81	0.54	1.57	1.05	0.78	0.52	1.51	1.01	0.76	0.50	1.47	0.98	0.74	0.49	1.37	0.91	0.68	0.46
1.38	0.92	0.69	0.46	1.33	0.89	0.67	0.44	1.28	0.86	0.64	0.43	1.25	0.83	0.62	0.42	1.21	0.81	0.60	0.40
1.20	0.80	0.60	0.40	1.14	0.76	0.57	0.38	1.03	0.69	0.52	0.34	0.82	0.55	0.41	0.27	0.74	0.49	0.37	0.25

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

10 ≤ α < 15°																			
2																			
≤ 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
1.58	1.05	0.79	0.53	1.48	0.99	0.74	0.49	1.43	0.95	0.72	0.48	1.41	0.94	0.70	0.47	1.32	0.88	0.66	0.44
1.34	0.89	0.67	0.45	1.25	0.84	0.63	0.42	1.22	0.81	0.61	0.41	1.19	0.79	0.60	0.40	1.15	0.76	0.57	0.38
1.15	0.76	0.57	0.38	0.97	0.65	0.48	0.32	0.87	0.58	0.43	0.29	0.71	0.47	0.35	0.24	0.65	0.44	0.33	0.22

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.54	1.02	0.77	0.51	1.54	1.02	0.77	0.51	1.46	0.98	0.73	0.49	1.42	0.94	0.71	0.47	1.31	0.87	0.65	0.44
1.30	0.87	0.65	0.43	1.30	0.87	0.65	0.43	1.25	0.83	0.62	0.42	1.15	0.77	0.58	0.38	1.04	0.69	0.52	0.35
1.00	0.67	0.50	0.33	1.00	0.67	0.50	0.33	0.88	0.59	0.44	0.29	0.68	0.45	0.34	0.23	0.60	0.40	0.30	0.20

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.49	0.99	0.74	0.50	1.44	0.96	0.72	0.48	1.38	0.92	0.69	0.46	1.35	0.90	0.68	0.45	1.25	0.84	0.63	0.42
1.26	0.84	0.63	0.42	1.21	0.81	0.60	0.40	1.09	0.73	0.55	0.36	1.02	0.68	0.51	0.34	0.94	0.63	0.47	0.31
0.92	0.62	0.46	0.31	0.84	0.56	0.42	0.28	0.74	0.49	0.37	0.25	0.59	0.39	0.29	0.20	0.53	0.35	0.26	0.18

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.45	0.97	0.72	0.48	1.36	0.91	0.68	0.45	1.31	0.87	0.66	0.44	1.29	0.86	0.64	0.43	1.18	0.79	0.59	0.39
1.22	0.81	0.61	0.41	1.04	0.69	0.52	0.35	0.95	0.64	0.48	0.32	0.91	0.61	0.45	0.30	0.85	0.56	0.42	0.28
0.85	0.56	0.42	0.28	0.69	0.46	0.35	0.23	0.62	0.42	0.31	0.21	0.51	0.34	0.25	0.17	0.47	0.32	0.24	0.16

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
3																			
≤ 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
1.38	0.92	0.69	0.46	1.38	0.92	0.69	0.46	1.31	0.87	0.66	0.44	1.22	0.81	0.61	0.41	1.05	0.70	0.53	0.35
1.05	0.70	0.52	0.35	1.05	0.70	0.52	0.35	0.90	0.60	0.45	0.30	0.80	0.53	0.40	0.27	0.70	0.47	0.35	0.23
0.67	0.45	0.33	0.22	0.67	0.45	0.33	0.22	0.58	0.38	0.29	0.19	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2.5																			
≤ 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
1.34	0.89	0.67	0.45	1.27	0.85	0.64	0.42	1.15	0.77	0.58	0.38	1.07	0.71	0.54	0.36	0.93	0.62	0.47	0.31
0.95	0.63	0.47	0.32	0.85	0.56	0.42	0.28	0.75	0.50	0.37	0.25	0.68	0.46	0.34	0.23	0.62	0.41	0.31	0.21
0.61	0.41	0.30	0.20	0.55	0.36	0.27	0.18	0.48	0.32	0.24	0.16	0.38	0.25	0.19	0.13	0.35	0.23	0.17	0.12

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

20° ≤ α < 25°																			
2																			
≤ 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
1.29	0.86	0.64	0.43	1.10	0.73	0.55	0.37	0.98	0.66	0.49	0.33	0.93	0.62	0.46	0.31	0.82	0.55	0.41	0.27
0.85	0.57	0.43	0.28	0.70	0.47	0.35	0.23	0.63	0.42	0.32	0.21	0.59	0.39	0.30	0.20	0.55	0.36	0.27	0.18
0.55	0.36	0.27	0.18	0.45	0.30	0.23	0.15	0.41	0.27	0.20	0.14	0.33	0.22	0.17	0.11	0.31	0.20	0.15	0.10

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
3																			
≤ 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
1.15	0.77	0.58	0.38	1.15	0.77	0.58	0.38	0.98	0.66	0.49	0.33	0.87	0.58	0.44	0.29	0.74	0.49	0.37	0.25
0.73	0.49	0.37	0.24	0.73	0.49	0.37	0.24	0.63	0.42	0.32	0.21	0.56	0.37	0.28	0.19	0.49	0.33	0.25	0.16
0.47	0.31	0.23	0.16	0.47	0.31	0.23	0.16	0.41	0.27	0.20	0.14	0.31	0.21	0.16	0.10	0.28	0.19	0.14	0.09

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2.5																			
≤ 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
1.04	0.69	0.52	0.35	0.93	0.62	0.46	0.31	0.82	0.54	0.41	0.27	0.75	0.50	0.38	0.25	0.65	0.43	0.32	0.22
0.66	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.52	0.35	0.26	0.17	0.48	0.32	0.24	0.16	0.44	0.29	0.22	0.15
0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13	0.34	0.23	0.17	0.11	0.27	0.18	0.14	0.09	0.25	0.16	0.12	0.08

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2																			
≤ 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
0.94	0.62	0.47	0.31	0.77	0.51	0.38	0.26	0.69	0.46	0.34	0.23	0.65	0.43	0.32	0.22	0.58	0.38	0.29	0.19
0.60	0.40	0.30	0.20	0.49	0.33	0.25	0.16	0.45	0.30	0.22	0.15	0.42	0.28	0.21	0.14	0.38	0.26	0.19	0.13
0.38	0.26	0.19	0.13	0.32	0.22	0.16	0.11	0.29	0.19	0.15	0.10	0.24	0.16	0.12	0.08	0.22	0.15	0.11	0.07

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
3																			
≤ 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
0.83	0.55	0.42	0.28	0.83	0.55	0.42	0.28	0.71	0.47	0.36	0.24	0.63	0.42	0.32	0.21	0.54	0.36	0.27	0.18
0.53	0.35	0.27	0.18	0.53	0.35	0.27	0.18	0.46	0.31	0.23	0.15	0.41	0.27	0.20	0.14	0.36	0.24	0.18	0.12
0.35	0.23	0.17	0.12	0.35	0.23	0.17	0.12	0.30	0.20	0.15	0.10	0.23	0.16	0.12	0.08	0.21	0.14	0.10	0.07

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.75	0.50	0.38	0.25	0.67	0.45	0.34	0.22	0.59	0.39	0.30	0.20	0.54	0.36	0.27	0.18	0.48	0.32	0.24	0.16
0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14	0.38	0.26	0.19	0.13	0.35	0.24	0.18	0.12	0.32	0.22	0.16	0.11
0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

$\alpha = 30^\circ$																			
2																			
≤ 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
0.68	0.45	0.34	0.23	0.56	0.37	0.28	0.19	0.50	0.34	0.25	0.17	0.47	0.31	0.24	0.16	0.42	0.28	0.21	0.14
0.44	0.29	0.22	0.15	0.36	0.24	0.18	0.12	0.32	0.22	0.16	0.11	0.31	0.21	0.15	0.10	0.28	0.19	0.14	0.09
0.28	0.19	0.14	0.09	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.17	0.12	0.09	0.06	0.16	0.11	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for
REVOLUTION MAXLINE 340

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
3																			
≤ 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
1.94	1.29	0.97	0.65	1.94	1.29	0.97	0.65	1.85	1.23	0.92	0.62	1.78	1.19	0.89	0.59	1.65	1.10	0.82	0.55
1.64	1.09	0.82	0.55	1.64	1.09	0.82	0.55	1.53	1.02	0.77	0.51	1.42	0.94	0.71	0.47	1.29	0.86	0.65	0.43
1.25	0.84	0.63	0.42	1.25	0.84	0.63	0.42	1.13	0.75	0.57	0.38	0.90	0.60	0.45	0.30	0.81	0.54	0.41	0.27

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2.5																			
≤ 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
1.88	1.25	0.94	0.63	1.82	1.21	0.91	0.61	1.74	1.16	0.87	0.58	1.70	1.13	0.85	0.57	1.56	1.04	0.78	0.52
1.58	1.05	0.79	0.53	1.47	0.98	0.73	0.49	1.35	0.90	0.68	0.45	1.28	0.85	0.64	0.43	1.18	0.79	0.59	0.39
1.17	0.78	0.58	0.39	1.08	0.72	0.54	0.36	0.98	0.66	0.49	0.33	0.80	0.53	0.40	0.27	0.74	0.49	0.37	0.25

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2																			
≤ 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
1.82	1.22	0.91	0.61	1.71	1.14	0.86	0.57	1.65	1.10	0.82	0.55	1.58	1.06	0.79	0.53	1.45	0.96	0.72	0.48
1.48	0.99	0.74	0.49	1.29	0.86	0.65	0.43	1.21	0.81	0.60	0.40	1.15	0.77	0.58	0.38	1.09	0.73	0.55	0.36
1.09	0.73	0.55	0.36	0.94	0.63	0.47	0.31	0.87	0.58	0.43	0.29	0.72	0.48	0.36	0.24	0.67	0.45	0.34	0.22

Note: Refer to Note 16 to find out installation exclusion zones.



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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.68	1.12	0.84	0.56	1.68	1.12	0.84	0.56	1.55	1.03	0.78	0.52	1.44	0.96	0.72	0.48	1.26	0.84	0.63	0.42
1.25	0.84	0.63	0.42	1.25	0.84	0.63	0.42	1.13	0.75	0.57	0.38	1.04	0.69	0.52	0.35	0.94	0.63	0.47	0.31
0.91	0.61	0.45	0.30	0.91	0.61	0.45	0.30	0.81	0.54	0.40	0.27	0.64	0.43	0.32	0.21	0.57	0.38	0.29	0.19

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.60	1.07	0.80	0.53	1.50	1.00	0.75	0.50	1.38	0.92	0.69	0.46	1.30	0.86	0.65	0.43	1.15	0.77	0.58	0.38
1.17	0.78	0.58	0.39	1.08	0.72	0.54	0.36	0.98	0.66	0.49	0.33	0.92	0.62	0.46	0.31	0.85	0.57	0.43	0.28
0.84	0.56	0.42	0.28	0.77	0.51	0.38	0.26	0.70	0.47	0.35	0.23	0.56	0.37	0.28	0.19	0.50	0.33	0.25	0.17

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.50	1.00	0.75	0.50	1.31	0.87	0.66	0.44	1.22	0.82	0.61	0.41	1.17	0.78	0.58	0.39	1.06	0.71	0.53	0.35
1.09	0.73	0.55	0.36	0.94	0.63	0.47	0.31	0.87	0.58	0.43	0.29	0.83	0.55	0.42	0.28	0.78	0.52	0.39	0.26
0.78	0.52	0.39	0.26	0.66	0.44	0.33	0.22	0.59	0.39	0.30	0.20	0.48	0.32	0.24	0.16	0.45	0.30	0.22	0.15

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.34	0.89	0.67	0.45	1.34	0.89	0.67	0.45	1.21	0.81	0.60	0.40	1.10	0.74	0.55	0.37	0.97	0.65	0.48	0.32
0.96	0.64	0.48	0.32	0.96	0.64	0.48	0.32	0.85	0.57	0.43	0.28	0.78	0.52	0.39	0.26	0.71	0.47	0.35	0.24
0.68	0.46	0.34	0.23	0.68	0.46	0.34	0.23	0.60	0.40	0.30	0.20	0.47	0.31	0.23	0.16	0.41	0.27	0.20	0.14

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
1.25	0.83	0.62	0.42	1.15	0.77	0.58	0.38	1.06	0.70	0.53	0.35	0.99	0.66	0.50	0.33	0.88	0.58	0.44	0.29
0.89	0.59	0.45	0.30	0.82	0.55	0.41	0.27	0.75	0.50	0.37	0.25	0.69	0.46	0.35	0.23	0.64	0.43	0.32	0.21
0.63	0.42	0.32	0.21	0.57	0.38	0.28	0.19	0.50	0.33	0.25	0.17	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
1.17	0.78	0.58	0.39	1.01	0.67	0.50	0.34	0.93	0.62	0.46	0.31	0.89	0.59	0.44	0.30	0.80	0.53	0.40	0.27
0.82	0.55	0.41	0.27	0.71	0.47	0.35	0.24	0.65	0.43	0.32	0.22	0.62	0.41	0.31	0.21	0.58	0.38	0.29	0.19
0.58	0.38	0.29	0.19	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.35	0.23	0.17	0.12	0.32	0.21	0.16	0.11

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
1.01	0.67	0.50	0.34	1.01	0.67	0.50	0.34	0.90	0.60	0.45	0.30	0.82	0.55	0.41	0.27	0.72	0.48	0.36	0.24
0.72	0.48	0.36	0.24	0.72	0.48	0.36	0.24	0.61	0.41	0.30	0.20	0.55	0.36	0.27	0.18	0.48	0.32	0.24	0.16
0.45	0.30	0.23	0.15	0.45	0.30	0.23	0.15	0.39	0.26	0.20	0.13	0.30	0.20	0.15	0.10	0.27	0.18	0.13	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
0.94	0.62	0.47	0.31	0.86	0.58	0.43	0.29	0.78	0.52	0.39	0.26	0.73	0.49	0.36	0.24	0.63	0.42	0.32	0.21
0.64	0.43	0.32	0.21	0.58	0.38	0.29	0.19	0.51	0.34	0.25	0.17	0.46	0.31	0.23	0.15	0.42	0.28	0.21	0.14
0.41	0.27	0.20	0.14	0.37	0.25	0.18	0.12	0.33	0.22	0.17	0.11	0.26	0.17	0.13	0.09	0.23	0.16	0.12	0.08

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
0.87	0.58	0.44	0.29	0.74	0.50	0.37	0.25	0.67	0.45	0.34	0.22	0.63	0.42	0.32	0.21	0.56	0.37	0.28	0.19
0.58	0.39	0.29	0.19	0.48	0.32	0.24	0.16	0.43	0.29	0.22	0.14	0.40	0.27	0.20	0.13	0.38	0.25	0.19	0.13
0.38	0.25	0.19	0.13	0.31	0.21	0.15	0.10	0.28	0.18	0.14	0.09	0.23	0.15	0.11	0.08	0.21	0.14	0.11	0.07

Note: Refer to Note 16 to find out installation exclusion zones.



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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
3																			
≤ 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
0.78	0.52	0.39	0.26	0.78	0.52	0.39	0.26	0.67	0.45	0.34	0.22	0.59	0.39	0.30	0.20	0.50	0.33	0.25	0.17
0.49	0.33	0.25	0.16	0.49	0.33	0.25	0.16	0.43	0.29	0.22	0.14	0.38	0.26	0.19	0.13	0.33	0.22	0.17	0.11
0.32	0.22	0.16	0.11	0.32	0.22	0.16	0.11	0.28	0.18	0.14	0.09	0.21	0.14	0.11	0.07	0.19	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2.5																			
≤ 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
0.70	0.47	0.35	0.23	0.63	0.42	0.32	0.21	0.55	0.37	0.28	0.18	0.51	0.34	0.26	0.17	0.44	0.29	0.22	0.15
0.45	0.30	0.22	0.15	0.40	0.27	0.20	0.13	0.35	0.24	0.18	0.12	0.33	0.22	0.17	0.11	0.30	0.20	0.15	0.10
0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09	0.23	0.15	0.12	0.08	0.19	0.12	0.09	0.06	0.17	0.11	0.08	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

25° ≤ α < 30°																			
2																			
≤ 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
0.64	0.43	0.32	0.21	0.52	0.35	0.26	0.17	0.47	0.31	0.24	0.16	0.44	0.29	0.22	0.15	0.39	0.26	0.20	0.13
0.41	0.27	0.20	0.14	0.33	0.22	0.17	0.11	0.30	0.20	0.15	0.10	0.28	0.19	0.14	0.09	0.26	0.17	0.13	0.09
0.26	0.17	0.13	0.09	0.22	0.14	0.11	0.07	0.20	0.13	0.10	0.07	0.16	0.11	0.08	0.05	0.15	0.10	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.57	0.38	0.28	0.19	0.57	0.38	0.28	0.19	0.49	0.33	0.24	0.16	0.43	0.29	0.22	0.14	0.36	0.24	0.18	0.12
0.36	0.24	0.18	0.12	0.36	0.24	0.18	0.12	0.32	0.21	0.16	0.11	0.28	0.18	0.14	0.09	0.25	0.16	0.12	0.08
0.24	0.16	0.12	0.08	0.24	0.16	0.12	0.08	0.21	0.14	0.10	0.07	0.16	0.11	0.08	0.05	0.14	0.09	0.07	0.05

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.51	0.34	0.26	0.17	0.46	0.30	0.23	0.15	0.41	0.27	0.20	0.14	0.37	0.25	0.18	0.12	0.32	0.22	0.16	0.11
0.33	0.22	0.17	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07
0.22	0.14	0.11	0.07	0.19	0.13	0.10	0.06	0.17	0.11	0.08	0.06	0.14	0.09	0.07	0.05	0.13	0.08	0.06	0.04

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.46	0.31	0.23	0.15	0.38	0.25	0.19	0.13	0.34	0.23	0.17	0.11	0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09
0.30	0.20	0.15	0.10	0.25	0.16	0.12	0.08	0.22	0.15	0.11	0.07	0.21	0.14	0.10	0.07	0.19	0.13	0.10	0.06
0.19	0.13	0.10	0.06	0.16	0.11	0.08	0.05	0.15	0.10	0.07	0.05	0.12	0.08	0.06	0.04	0.11	0.08	0.06	0.04

Note: Refer to Note 16 to find out installation exclusion zones.



PV-ezRack SolarRoof Interface spacing table for

STEELINE LOKDECK 680

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
3																			
≤ 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
1.70	1.13	0.85	0.57	1.70	1.13	0.85	0.57	1.57	1.05	0.78	0.52	1.46	0.98	0.73	0.49	1.30	0.87	0.65	0.43
1.29	0.86	0.65	0.43	1.29	0.86	0.65	0.43	1.18	0.78	0.59	0.39	1.09	0.73	0.55	0.36	1.00	0.67	0.50	0.33
0.97	0.65	0.48	0.32	0.97	0.65	0.48	0.32	0.87	0.58	0.43	0.29	0.69	0.46	0.35	0.23	0.63	0.42	0.31	0.21

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2.5																			
≤ 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
1.61	1.07	0.80	0.54	1.51	1.01	0.76	0.50	1.41	0.94	0.70	0.47	1.34	0.89	0.67	0.45	1.20	0.80	0.60	0.40
1.22	0.81	0.61	0.41	1.13	0.75	0.57	0.38	1.05	0.70	0.52	0.35	0.98	0.66	0.49	0.33	0.92	0.61	0.46	0.31
0.90	0.60	0.45	0.30	0.83	0.55	0.42	0.28	0.76	0.51	0.38	0.25	0.62	0.41	0.31	0.21	0.57	0.38	0.29	0.19

ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)

0° < α < 10°																			
2																			
≤ 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
1.53	1.02	0.76	0.51	1.35	0.90	0.68	0.45	1.26	0.84	0.63	0.42	1.22	0.81	0.61	0.41	1.12	0.74	0.56	0.37
1.14	0.76	0.57	0.38	1.00	0.67	0.50	0.33	0.93	0.62	0.47	0.31	0.89	0.59	0.45	0.30	0.84	0.56	0.42	0.28
0.84	0.56	0.42	0.28	0.72	0.48	0.36	0.24	0.67	0.45	0.33	0.22	0.55	0.37	0.28	0.18	0.52	0.35	0.26	0.17

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
3																			
≤ 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
1.31	0.87	0.66	0.44	1.31	0.87	0.66	0.44	1.19	0.79	0.60	0.40	1.10	0.74	0.55	0.37	0.97	0.65	0.48	0.32
0.97	0.65	0.48	0.32	0.97	0.65	0.48	0.32	0.87	0.58	0.43	0.29	0.80	0.53	0.40	0.27	0.72	0.48	0.36	0.24
0.70	0.47	0.35	0.23	0.70	0.47	0.35	0.23	0.62	0.42	0.31	0.21	0.49	0.33	0.25	0.16	0.44	0.29	0.22	0.15

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2.5																			
≤ 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
1.23	0.82	0.62	0.41	1.15	0.77	0.58	0.38	1.06	0.70	0.53	0.35	0.99	0.66	0.50	0.33	0.89	0.59	0.45	0.30
0.90	0.60	0.45	0.30	0.83	0.55	0.42	0.28	0.76	0.51	0.38	0.25	0.72	0.48	0.36	0.24	0.66	0.44	0.33	0.22
0.65	0.43	0.32	0.22	0.59	0.39	0.30	0.20	0.54	0.36	0.27	0.18	0.43	0.28	0.21	0.14	0.39	0.26	0.19	0.13

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

10 ≤ α < 15°																			
2																			
≤ 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
1.16	0.77	0.58	0.39	1.01	0.67	0.50	0.34	0.94	0.62	0.47	0.31	0.90	0.60	0.45	0.30	0.82	0.54	0.41	0.27
0.84	0.56	0.42	0.28	0.72	0.48	0.36	0.24	0.67	0.45	0.33	0.22	0.64	0.43	0.32	0.21	0.60	0.40	0.30	0.20
0.60	0.40	0.30	0.20	0.51	0.34	0.25	0.17	0.45	0.30	0.23	0.15	0.37	0.25	0.19	0.12	0.35	0.23	0.17	0.12

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
3																			
≤ 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
1.03	0.69	0.52	0.34	1.03	0.69	0.52	0.34	0.93	0.62	0.46	0.31	0.86	0.57	0.43	0.29	0.75	0.50	0.37	0.25
0.74	0.49	0.37	0.25	0.74	0.49	0.37	0.25	0.66	0.44	0.33	0.22	0.60	0.40	0.30	0.20	0.55	0.36	0.27	0.18
0.52	0.35	0.26	0.17	0.52	0.35	0.26	0.17	0.46	0.31	0.23	0.15	0.36	0.24	0.18	0.12	0.31	0.21	0.16	0.10

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2.5																			
≤ 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
0.96	0.64	0.48	0.32	0.89	0.59	0.44	0.30	0.81	0.54	0.40	0.27	0.76	0.51	0.38	0.25	0.68	0.45	0.34	0.23
0.68	0.46	0.34	0.23	0.63	0.42	0.32	0.21	0.57	0.38	0.28	0.19	0.54	0.36	0.27	0.18	0.49	0.33	0.25	0.16
0.48	0.32	0.24	0.16	0.44	0.29	0.22	0.15	0.38	0.26	0.19	0.13	0.31	0.20	0.15	0.10	0.28	0.19	0.14	0.09

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

15° ≤ α < 20°																			
2																			
≤ 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
0.90	0.60	0.45	0.30	0.78	0.52	0.39	0.26	0.71	0.47	0.36	0.24	0.68	0.45	0.34	0.23	0.62	0.41	0.31	0.21
0.64	0.43	0.32	0.21	0.55	0.36	0.27	0.18	0.50	0.33	0.25	0.17	0.48	0.32	0.24	0.16	0.45	0.30	0.22	0.15
0.45	0.30	0.22	0.15	0.36	0.24	0.18	0.12	0.32	0.22	0.16	0.11	0.27	0.18	0.13	0.09	0.25	0.16	0.12	0.08

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
3																			
≤ 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
0.78	0.52	0.39	0.26	0.78	0.52	0.39	0.26	0.70	0.46	0.35	0.23	0.64	0.43	0.32	0.21	0.55	0.37	0.28	0.18
0.55	0.36	0.27	0.18	0.55	0.36	0.27	0.18	0.47	0.31	0.23	0.16	0.42	0.28	0.21	0.14	0.37	0.25	0.18	0.12
0.35	0.24	0.18	0.12	0.35	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.23	0.16	0.12	0.08	0.21	0.14	0.10	0.07

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2.5																			
≤ 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
0.72	0.48	0.36	0.24	0.66	0.44	0.33	0.22	0.61	0.41	0.30	0.20	0.56	0.37	0.28	0.19	0.48	0.32	0.24	0.16
0.49	0.33	0.25	0.16	0.45	0.30	0.22	0.15	0.39	0.26	0.20	0.13	0.36	0.24	0.18	0.12	0.32	0.22	0.16	0.11
0.32	0.21	0.16	0.11	0.28	0.19	0.14	0.09	0.25	0.17	0.13	0.08	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

20° ≤ α < 25°																			
2																			
≤ 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
0.67	0.45	0.34	0.22	0.58	0.38	0.29	0.19	0.52	0.35	0.26	0.17	0.49	0.33	0.24	0.16	0.43	0.29	0.22	0.14
0.45	0.30	0.22	0.15	0.37	0.25	0.18	0.12	0.33	0.22	0.17	0.11	0.31	0.21	0.15	0.10	0.29	0.19	0.15	0.10
0.29	0.19	0.15	0.10	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.17	0.12	0.09	0.06	0.16	0.11	0.08	0.05

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
3																			
≤ 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
0.60	0.40	0.30	0.20	0.60	0.40	0.30	0.20	0.52	0.35	0.26	0.17	0.46	0.30	0.23	0.15	0.38	0.26	0.19	0.13
0.38	0.26	0.19	0.13	0.38	0.26	0.19	0.13	0.33	0.22	0.17	0.11	0.29	0.19	0.15	0.10	0.26	0.17	0.13	0.09
0.25	0.16	0.12	0.08	0.25	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.07	0.05

WRA

WRB

WRC

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2.5																			
≤ 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
0.54	0.36	0.27	0.18	0.49	0.33	0.24	0.16	0.43	0.29	0.22	0.14	0.39	0.26	0.20	0.13	0.34	0.23	0.17	0.11
0.35	0.23	0.17	0.12	0.31	0.21	0.15	0.10	0.28	0.18	0.14	0.09	0.25	0.17	0.13	0.08	0.23	0.15	0.12	0.08
0.22	0.15	0.11	0.07	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06	0.14	0.09	0.07	0.05	0.13	0.08	0.06	0.04

WRA

WRB

WRC

**ANGLE TO THE
HORIZONTAL**
TC
BUILDING HEIGHT
(m)

25° ≤ α < 30°																			
2																			
≤ 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
0.49	0.33	0.24	0.16	0.40	0.27	0.20	0.13	0.36	0.24	0.18	0.12	0.34	0.23	0.17	0.11	0.30	0.20	0.15	0.10
0.32	0.21	0.16	0.11	0.26	0.17	0.13	0.09	0.23	0.15	0.12	0.08	0.22	0.15	0.11	0.07	0.21	0.14	0.10	0.07
0.21	0.14	0.10	0.07	0.17	0.11	0.08	0.06	0.15	0.10	0.08	0.05	0.13	0.08	0.06	0.04	0.11	0.08	0.06	0.04

WRA

WRB

WRC

Note: Refer to Note 16 to find out installation exclusion zones.

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

Type of Rail	ER-R-ECO (Refer to Note 5 for other compatible rails)
Type of Interface	ER-I-34 (Refer to Note 5 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
3																			
≤ 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
0.43	0.29	0.22	0.14	0.43	0.29	0.22	0.14	0.38	0.25	0.19	0.13	0.34	0.22	0.17	0.11	0.28	0.19	0.14	0.09
0.28	0.18	0.14	0.09	0.28	0.18	0.14	0.09	0.24	0.16	0.12	0.08	0.22	0.14	0.11	0.07	0.19	0.13	0.10	0.06
0.18	0.12	0.09	0.06	0.18	0.12	0.09	0.06	0.16	0.11	0.08	0.05	0.12	0.08	0.06	0.04	0.11	0.07	0.05	0.04

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2.5																			
≤ 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
0.39	0.26	0.20	0.13	0.35	0.23	0.18	0.12	0.31	0.21	0.16	0.10	0.29	0.19	0.14	0.10	0.25	0.16	0.12	0.08
0.25	0.17	0.13	0.08	0.23	0.15	0.12	0.08	0.20	0.13	0.10	0.07	0.18	0.12	0.09	0.06	0.17	0.11	0.08	0.06
0.16	0.11	0.08	0.05	0.15	0.10	0.07	0.05	0.13	0.09	0.07	0.04	0.11	0.07	0.05	0.04	0.09	0.06	0.05	0.03

**ANGLE TO THE
HORIZONTAL
TC
BUILDING HEIGHT
(m)**

$\alpha = 30^\circ$																			
2																			
≤ 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
0.36	0.24	0.18	0.12	0.30	0.20	0.15	0.10	0.26	0.18	0.13	0.09	0.25	0.17	0.12	0.08	0.22	0.15	0.11	0.07
0.23	0.15	0.12	0.08	0.19	0.13	0.10	0.06	0.17	0.11	0.08	0.06	0.16	0.11	0.08	0.05	0.15	0.10	0.08	0.05
0.15	0.10	0.08	0.05	0.12	0.08	0.06	0.04	0.12	0.08	0.06	0.04	0.09	0.06	0.05	0.03	0.09	0.06	0.04	0.03

Note: Refer to Note 16 to find out installation exclusion zones.

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

- Klip-lok clamp
- Roofing sheet
- Fixing clip between roofing sheet to purlin

Note 3. This document does not cover the following:

- Building frame capacity

It has been assumed that the building frame will be able to resist the additional loadings imposed by the installation of the solar panels in conjunction with the Clenergy Mounting System.

Note 4. Roof pitch between 1° and 10°.

Note 5. The following components are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2011 Amdt 4-2016.

Components	Part No.	Description
ECO-Rail	ER-R-ECO/XXXX	ECO Rail
Splice	ER-SP-ECO	PV-ezRack Splice for ECO rail
Australian Made Mill Finish ECO Rail	R-ECO/XXXX/AUMF	PV-ezRack Australian Made Mill Finish ECO Rail
Black ECO-Rail	ER-R-ECO/XXXX/BA	Black ECO Rail
Black Splice ECO Rail	ER-SP-ECO/BA	Splice ECO Rail Black
Roof bracket	ER-I-09	Klip-lok Bracket
Roof bracket	ER-I-09/100/45	Klip-lok Bracket
Roof bracket	ER-I-29/AU	Klip-lok Bracket
Roof bracket	ER-I-32/AU	Klip-lok Bracket
Roof bracket	ER-I-34	Universal Klip-lok Bracket
Black Roof bracket	ER-I-09/BA	Black Klip-lok Bracket

Components	Part No.	Description
Black Roof bracket	ER-I-09/100/45/BA	Black Klip-lok Bracket
Black Roof bracket	ER-I-29/BA	Black Klip-lok Bracket
Black Roof bracket	ER-I-32/BA	Black Klip-lok Bracket
Black Roof bracket	ER-I-34/BA	Universal Klip-lok Bracket
Inter Clamp	ER-IC-STXX	Inter Clamp = Clamp + Z-Module + Bolt
End Clamp	ER-EC-STXX	End Clamp = Clamp + Z-Module + Bolt
Clamp	C-U/30/46-G	Universal Clamp for Frame Height 30-46mm with Grounding Clip
Clamp	C-U/30/46	Universal Clamp for Frame Height 30-46mm
End Clamp	ER-EC-DU35/40	End Clamp dual 35 or 40mm
End Clamp	ER-EC-DU40/46	End Clamp dual 40 or 46mm
Inter Security Clamp	ER-IC-STXX/S	Inter Clamp = Clamp + Z-Module + Security Bolt
End Security Clamp	ER-EC-STXX/S	End Clamp = Clamp + Z-Module + Security Bolt
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

Components	Part No.	Description
Tilt Legs	ER-TL-15/30/PS	15°/30° Adjustable Tilt Legs, Preassembly
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)

Components	Part No.	Description
Mid Clamp XX Black	ER-IC-STXXB	Inter Clamp XX Black
End Clamp XX Black	ER-EC-STXXB	End Clamp XX Black
Black Universal Clamp	C-U/30/46/BA	Black Universal Clamp
Black Universal Clamp	C-U/30/46-G/BA	Black Universal Clamp with grounding clip
Roof bracket	ER-I-34/CRC	Universal Klip-lok Bracket Pre-assembly with Cross Connection Clamp
Roof bracket	ER-I-34/05A/EZC	Universal Klip-lok Bracket Pre-assembly with Tin Interface
Roof bracket	ER-I-34/CRC/BA	Black Universal Klip-lok Bracket Pre-assembly with Cross Connection Clamp
Roof bracket	ER-I-34/05A/EZC/BA	Black Universal Klip-lok Bracket Pre-assembly with Tin Interface

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

Note 6. For Terrain Category (TC) definition. Refer to clause 4.2.1 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 7. Topographic Multiplier (Mt) taken as 1.0. Refer to clause 4.4 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 8. Shielding Multiplier (Ms) taken as 1.0. Refer to clause 4.3 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 9. Wind Direction Multiplier (Md) taken as 1.0. Refer to clause 3.3 of AS/NZS 1170.2:2011 (R2016) for more information.

Note 10. The installed frame must comply with the clamping zone of the PV Panel.

Note 11. Capacities checked and compared against testing data from Clenergy Australia and NATA certified testing.

Note 12. Maximum permitted rail overhang of 40% of the installation spacing.

Note 13. 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 14. 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 15. 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.

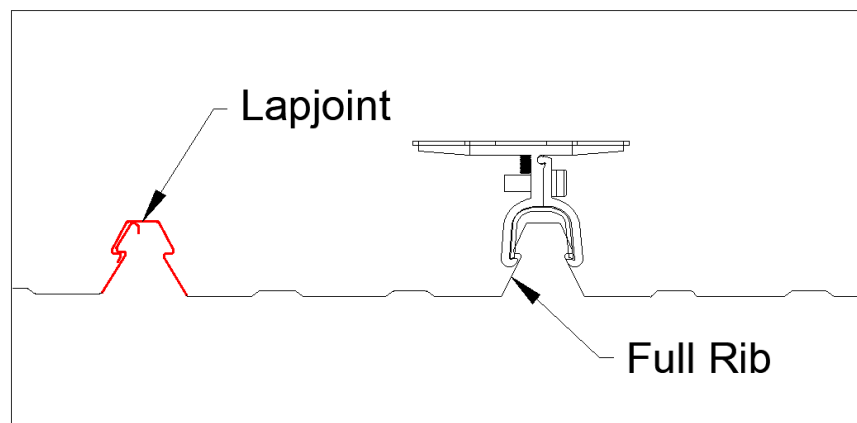
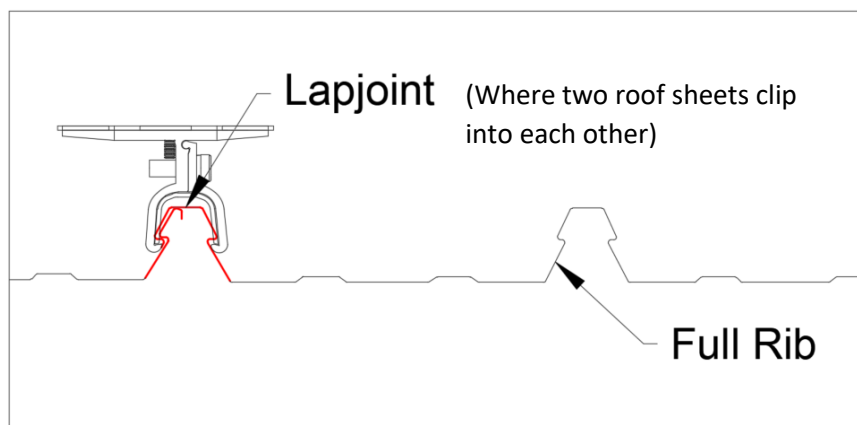
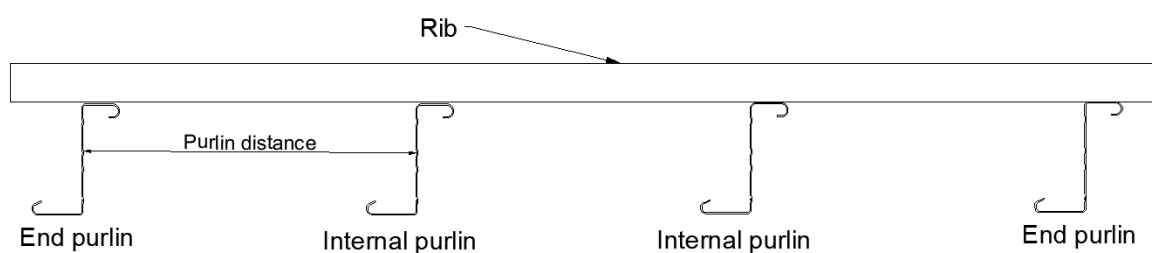
Note 16. Exclusion for installation of the klip-lok clamps on the roof depending on the type of roof sheet to be as per the following table

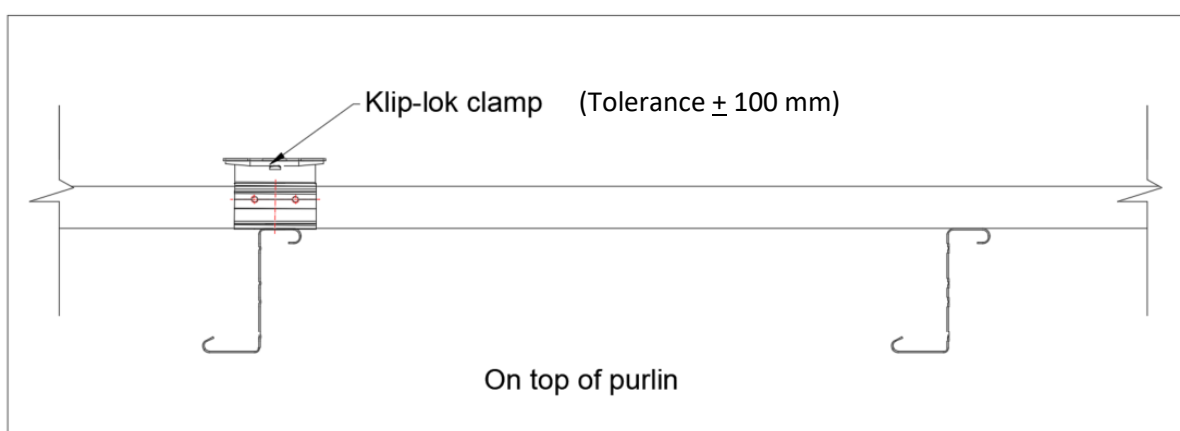
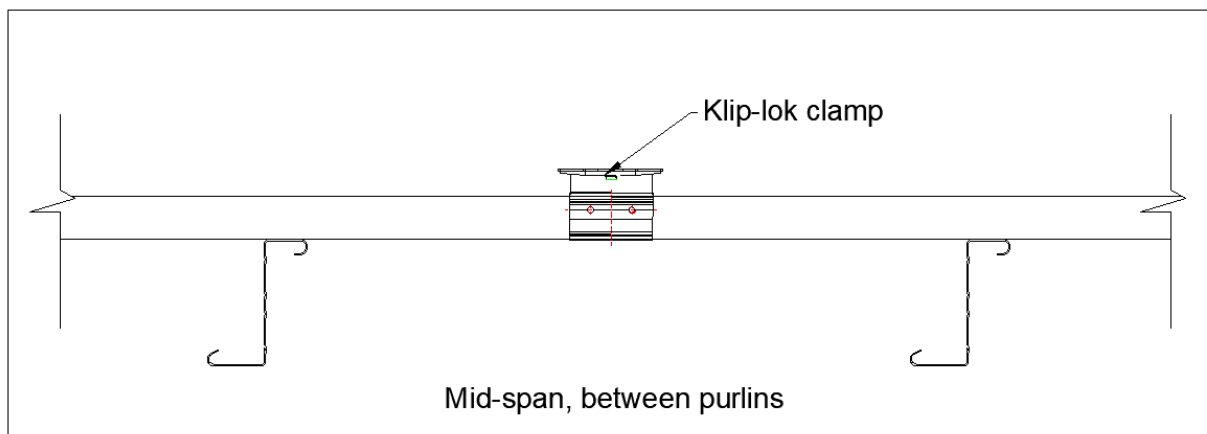
Roof Sheet type	Exclusions	Test Report No.
Lysaght KLIP-LOK 700 Classic	Lapjoints and full ribs when purlin spacing ≥ 2000 mm	MT-19/0633-A and 20-0028
Lysaght KLIP-LOK 700 Hi-Strength	Lapjoints between purlins	MT-11/023 and 20-0028
Lysaght KLIP-LOK 406	- Full ribs and lapjoints when purlin spacing ≥ 1600 mm; - Lapjoints when purlin spacing ≥ 1200mm	MT-17/001-A
Stramit Speed Deck Ultra	Lapjoints between purlins	MT-11/023
Fielders Kingklip 700	- Full ribs on top of purlins - Lapjoints between purlins	MT-11/280
Stratco Topdeck 700	- Full ribs and lapjoints when purlin spacing ≥ 2000 mm; - Lapjoints when purlins spacing ≥ 1200 mm	MT-17/001-B and MT-19/1007
Lysaght Longline 305	Full ribs between purlins on internal purlins	MT-13/133
Metroll Metlok 700	- Full ribs and lapjoints when purlin spacing ≥ 2000mm; - On top of purlin on lapjoint; - Lapjoints when purlin spacing ≥ 1200mm	MT-19/0633-B
Stramit Speed Deck 500	- Full ribs and lapjoints when purlin spacing ≥ 2000mm; - Full ribs when purlin spacing ≥ 1200mm.	MT-19/0762
Rev-klip 700	- Full ribs and lapjoints when purlin spacing ≥ 2000mm; - Full ribs when purlin spacing ≥ 1200mm	MT-19/1018-A
Metroll Metlok 500	Full ribs when purlins spacing ≥ 1200mm	7530/MJ
Steelline Steel-Rib 500	- Full ribs and lapjoints when purlin spacing ≥ 2000m; - Full ribs when purlin spacing ≥ 1200mm; - Full ribs on top of the purlin	MT-19/1090-B

Roof Sheet type	Exclusions	Test Repot No.
Revolution Maxline 340	Lapjoints when purlin spacing $\geq$ 1200mm	MT-19/1018-B
Steeline Lokdeck 680	Lapjoints when purlin spacing $\geq$ 1200mm	20-0028

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

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





Note 17. 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
-70%	-75%	-75%

Note 18. 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	- Lapjoints over the purlins - Lapjoints and full ribs when purlin spacing ≥ 1200 mm	MT- 20-066 I

Note 19. This Engineering report is based on 2 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.

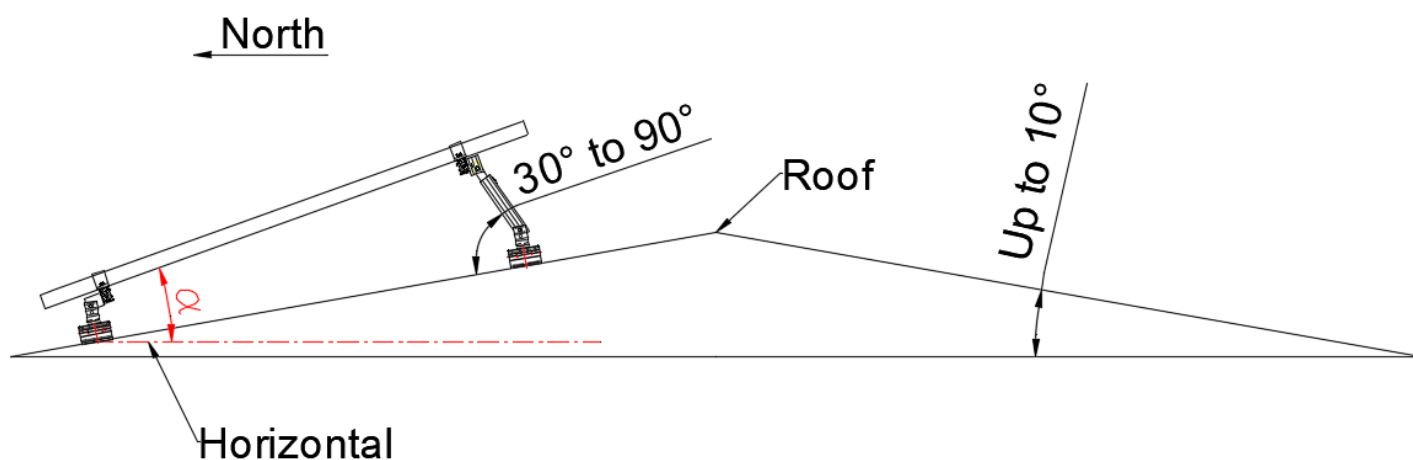
Number of rails per panel	Panel length / width (mm)	Spacing +/-
2 rails	$\leq 1700 / \leq 1100$	+ 8 %
3 rails	$\leq 1700 / \leq 1100$	+ 12 %
2 rails	$\leq 2000 / \leq 1100$	0 %
3 rails	$\leq 2000 / \leq 1100$	+ 10 %
2 rails	$\leq 2100 / \leq 1100$	- 10 %
3 rails	$\leq 2100 / \leq 1100$	+ 6 %
2 rails	$\leq 2200 / \leq 1100$	- 13 %
2 rails	$\leq 2200 / \leq 1200$	- 18 %

Note 20. Minimum number of bolts to be installed between the tilt leg base and the Klip-lok clamp to be one (1).

Note 21. 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.

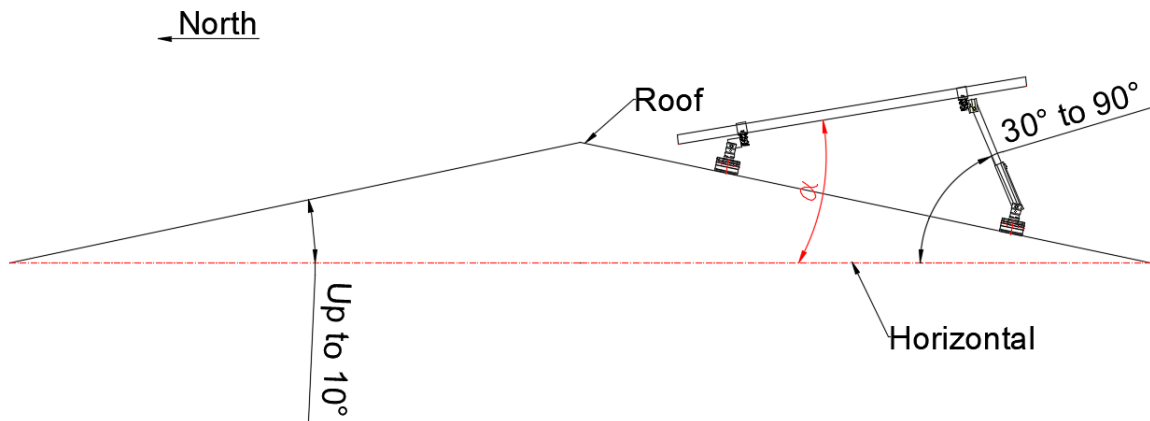
Note 22. Final tilt " α " identification as per below

Standard tilt



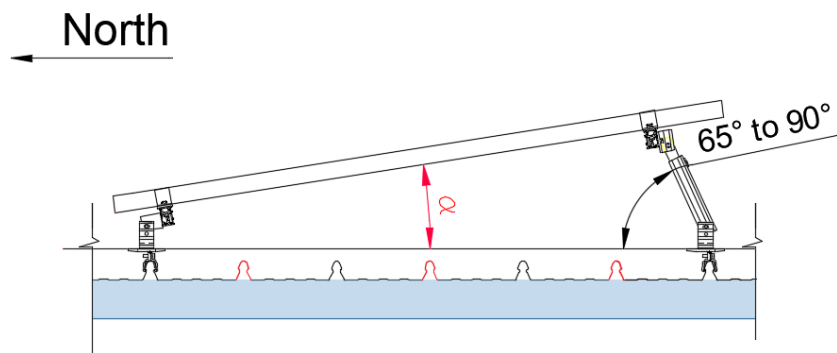
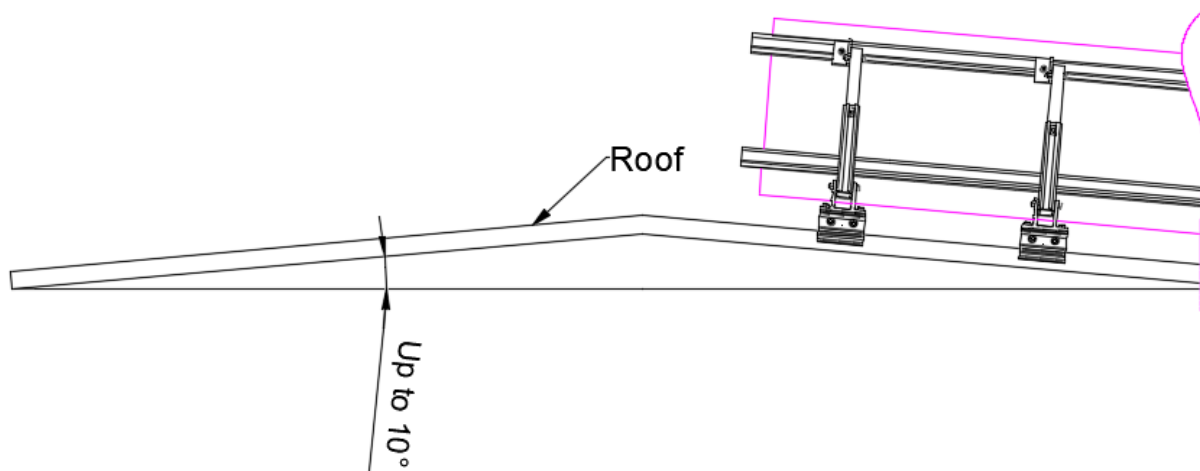
Back leg angle between 30° and 90°

Reverse tilt



Back leg angle between 30° and 90°

ECO – Rail parallel to ribs



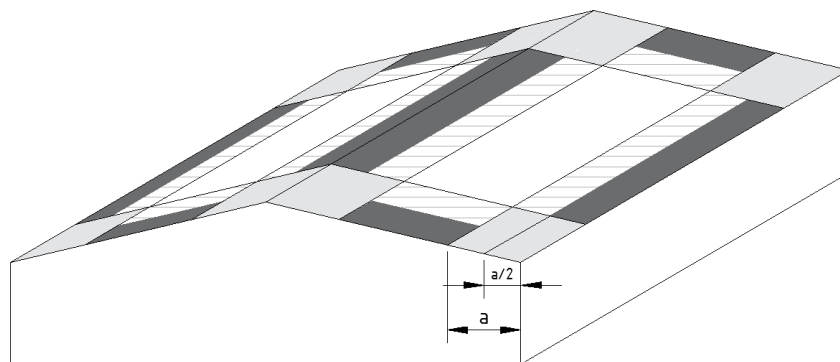
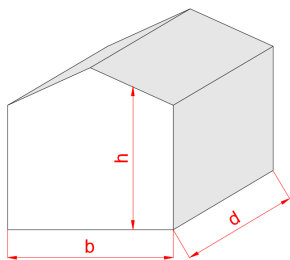
Back leg angle between 65° and 90°

Note 23. Roof Zone definition to be calculated as per below:

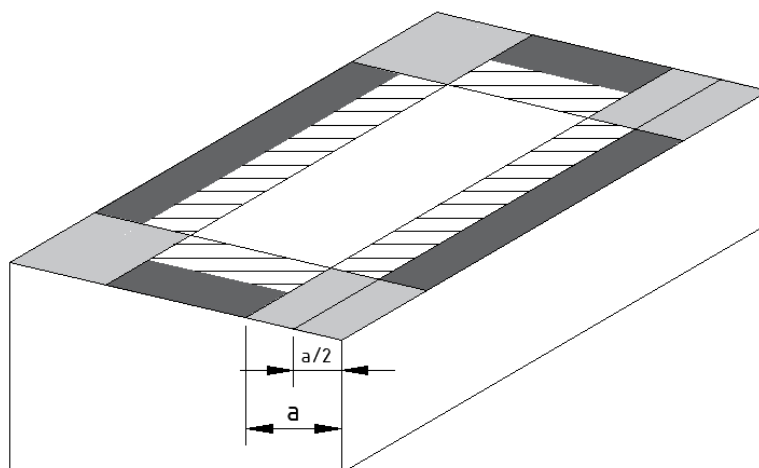
Step 1. Determine building height (h), width (b) and length (d).

Step 2. Choose the lowest value between "h", " $b \times 0.2$ " and " $d \times 0.2$ ".

Step 3. The lowest value on Step 2, equates to a.



Roof Pitch $< 10^\circ$



Legend:

-  Internal Zone
-  Intermediate Zone
-  Edge Zone
-  Corner Zone

Flat/Mono – Slope Roof $< 10^\circ$

Example for Klip-lok tilted systems

- Wind Region A
- Terrain Category: 3
- Building height: 5m
- Roof pitch: 3°
- Panel tilt: 10°
- Reverse tilt
- Roof Sheet: Lysaght Klip-lok 700 Classic
- Panel dimension: 2 m x 1 m
- Clamp spacing as per below:
 - Internal: 1680 mm
 - Intermediate: 1120 mm
 - Edge: 840 mm
 - Corner: 560 mm
- Exclusions as per **Note 16** for Klip-lok 700 Classic.



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Worldwide Network



**10 Year
Warranty***

SolarRoof Klip-lok Non-Penetrative with Tilt Legs V2.0 (September 2020)