

Klip-lok ComT 2.0 Installation Guide

Code-Compliant Planning and Installation Guide V1.1
Complying with AS/NZS 1170.2:2021



Introduction

The PVezRack® Klip-lok ComT is developed for PV installation on flat or pitched roofs. The unique fixing parts can be quickly and easily installed with simple tools. Please review this manual thoroughly before installing PVezRack® Klip-lok ComT.

This manual provides:

- 1) Supporting documentation for building permit applications relating to PVezRack® Klip-lok ComT.
- 2) Planning and installation instructions.

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The PVezRack® Klip-lok ComT parts, when installed in accordance with this guide, will be structurally sound and will meet the "AS/NZS 1170.2:2021 standard. During installation, and especially when working on the roof, please comply with the appropriate Occupational Health and Safety regulations.

Please also pay attention to any other relevant State or Federal regulations. Please check that you are using the latest version of the Installation Manual, which you can do by contacting Clenergy Australia via email on tech@clenergy.com.au, or contacting your local distributor in Australia.

Product Warranty:

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

The installer is solely responsible for:

- Complying with all applicable local or national building codes, including any updates that may supersede this manual;
- Ensuring that PVezRack® and other products are appropriate for the particular installation and the installation environment;
- Using only PVezRack® parts and installer-supplied parts as specified by PVezRack® (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 PVezRack® SolarRoof components as required in AS/NZS 5033: 2021.
- Ensuring that the roof, its rafters/purlins, connections and other structural support members can support the array under building live load conditions;
- Verifying the compatibility of the installation considering preventing electrochemical corrosion between dissimilar metals. This may occur between structures and the building and also between structures, fasteners and PV modules, as detailed in AS/NZS 5033: 2021;
- Verifying atmospheric corrosivity zone of installation site by referring to AS 4312-2008 or consulting local construction business to determine appropriate products and installations.

Planning

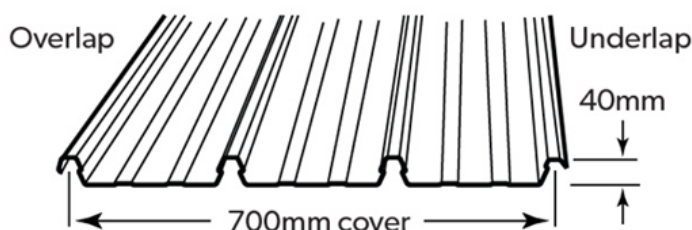
Determine the type of concealed roof

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

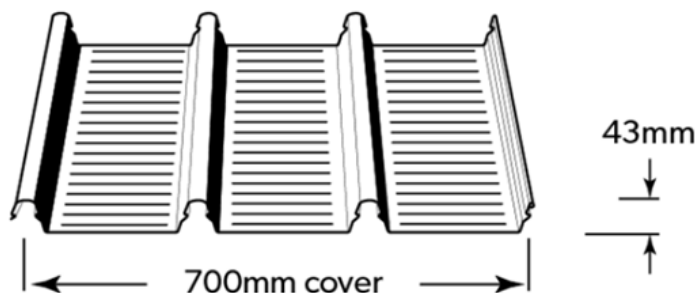
Notes:

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

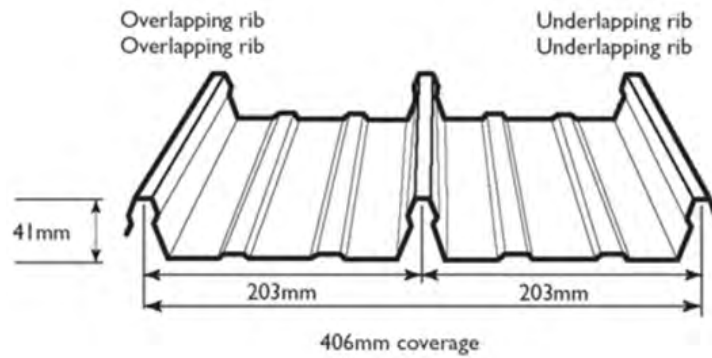
(1) Lysaght Klip Lok 700 Classic (Interface: ER-I-34, ER-I-09)



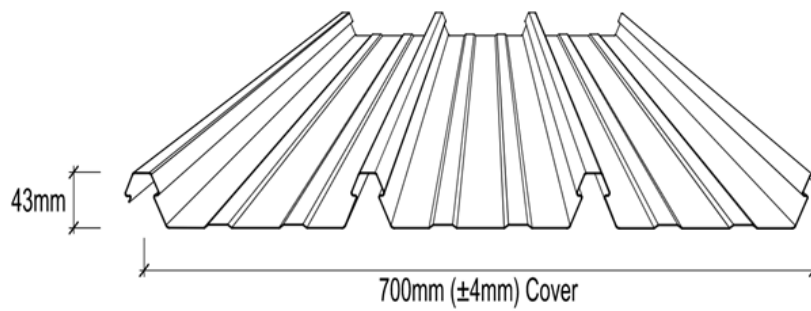
(2) Lysaght Klip-Lok 700 High Strength (Interface: ER-I-34, ER-I-09)



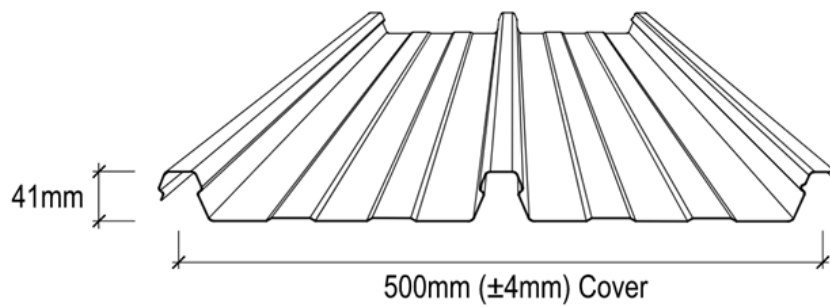
(3) Lysaught Klip-Lok 406 (Interface: ER-I-34, ER-I-32/AU)



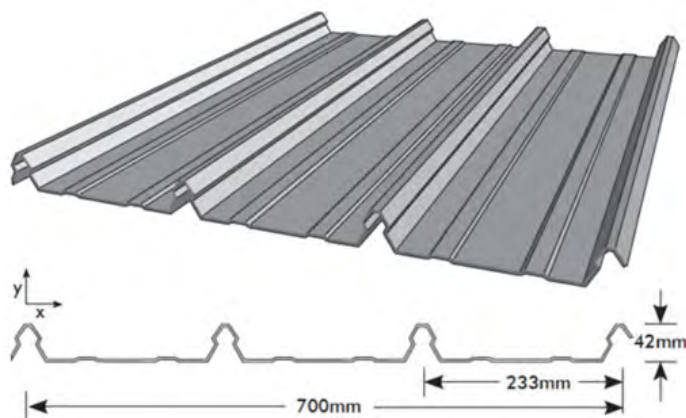
(4) Stramit Speed Deck Ultra (Interface: ER-I-34, ER-I-09)



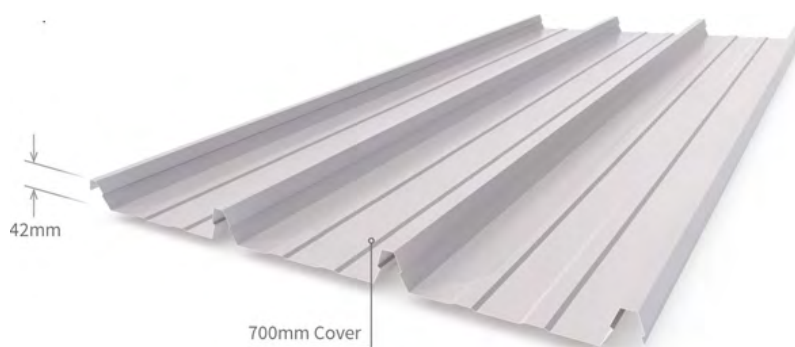
(5) Stramit Speed Deck 500 (Interface: ER-I-34, ER-I-09)



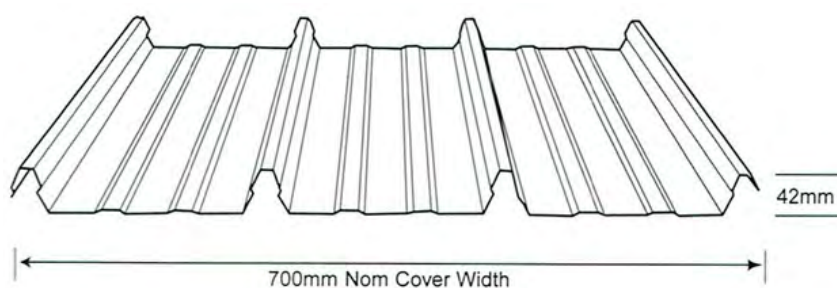
(6) Fielders Kingklip 700 (Interface: ER-I-34, ER-I-09)



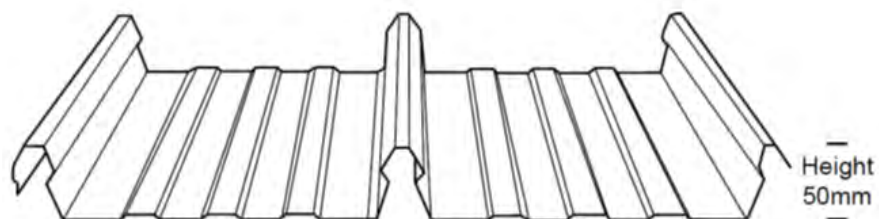
(7) Stratco Topdeck 700 (Interface: ER-I-34, ER-I-09)



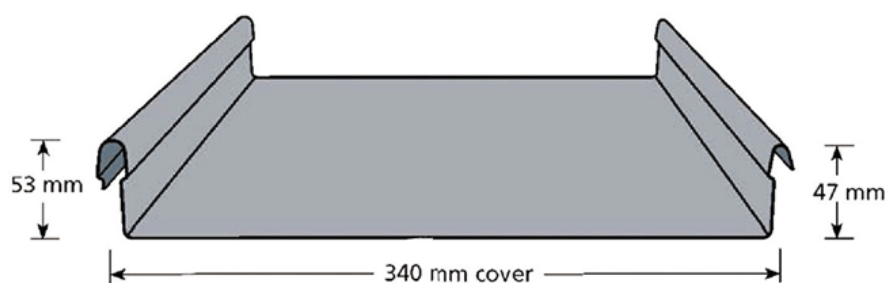
(8) Metroll Metlok 700 (Interface: ER-I-34, ER-I-09)



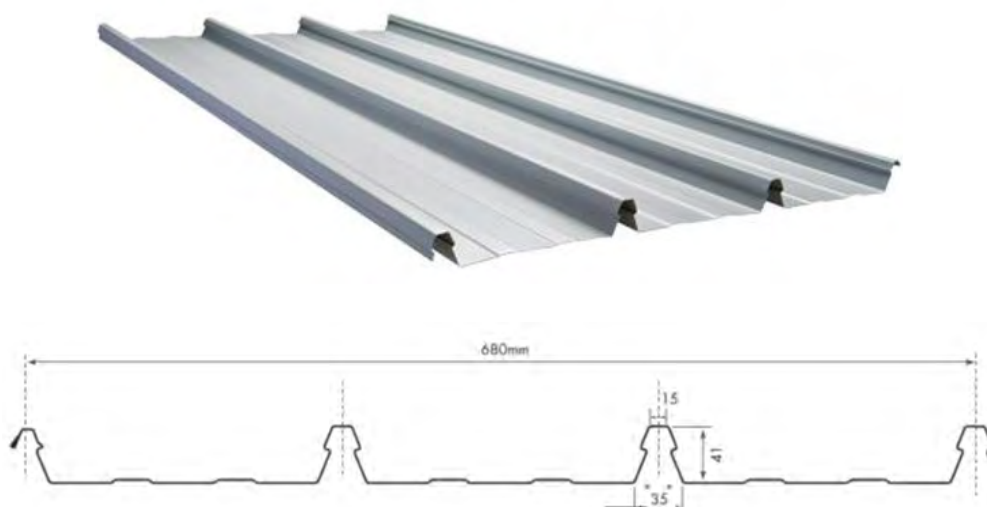
(9) Metroll Metlok 500 (Interface: ER-I-34)



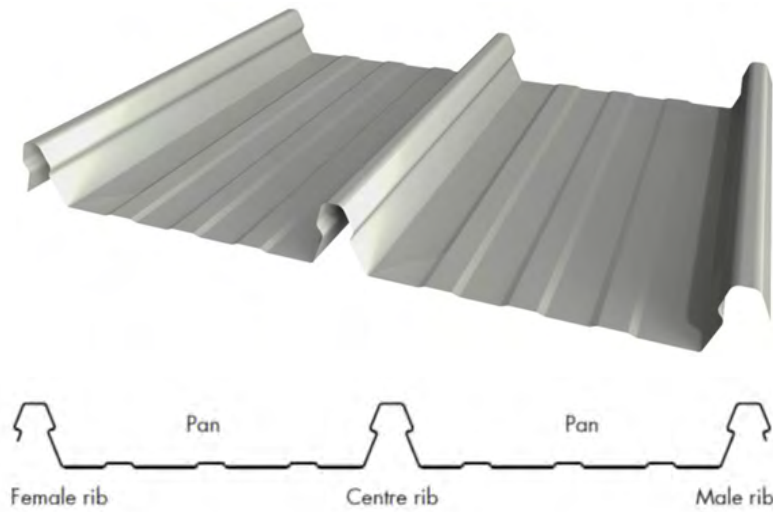
(10) Revolution Maxline 340 (Interface: ER-I-34)



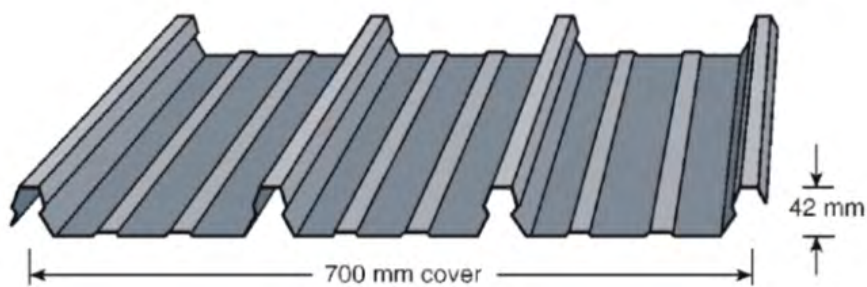
(11) Steeline Lokdek 680 (Interface: ER-I-34)



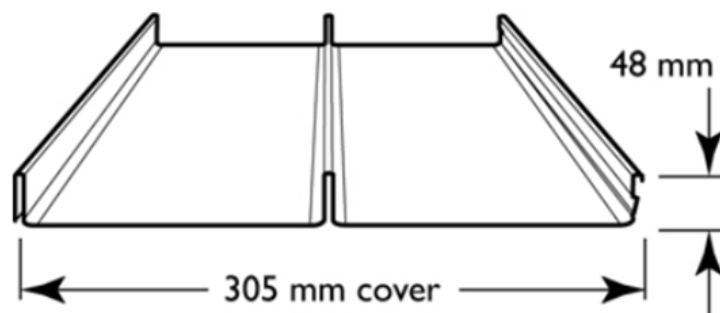
(12) Steeline Steel-Rib 500 (ST28) (Interface: ER-I-34)



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



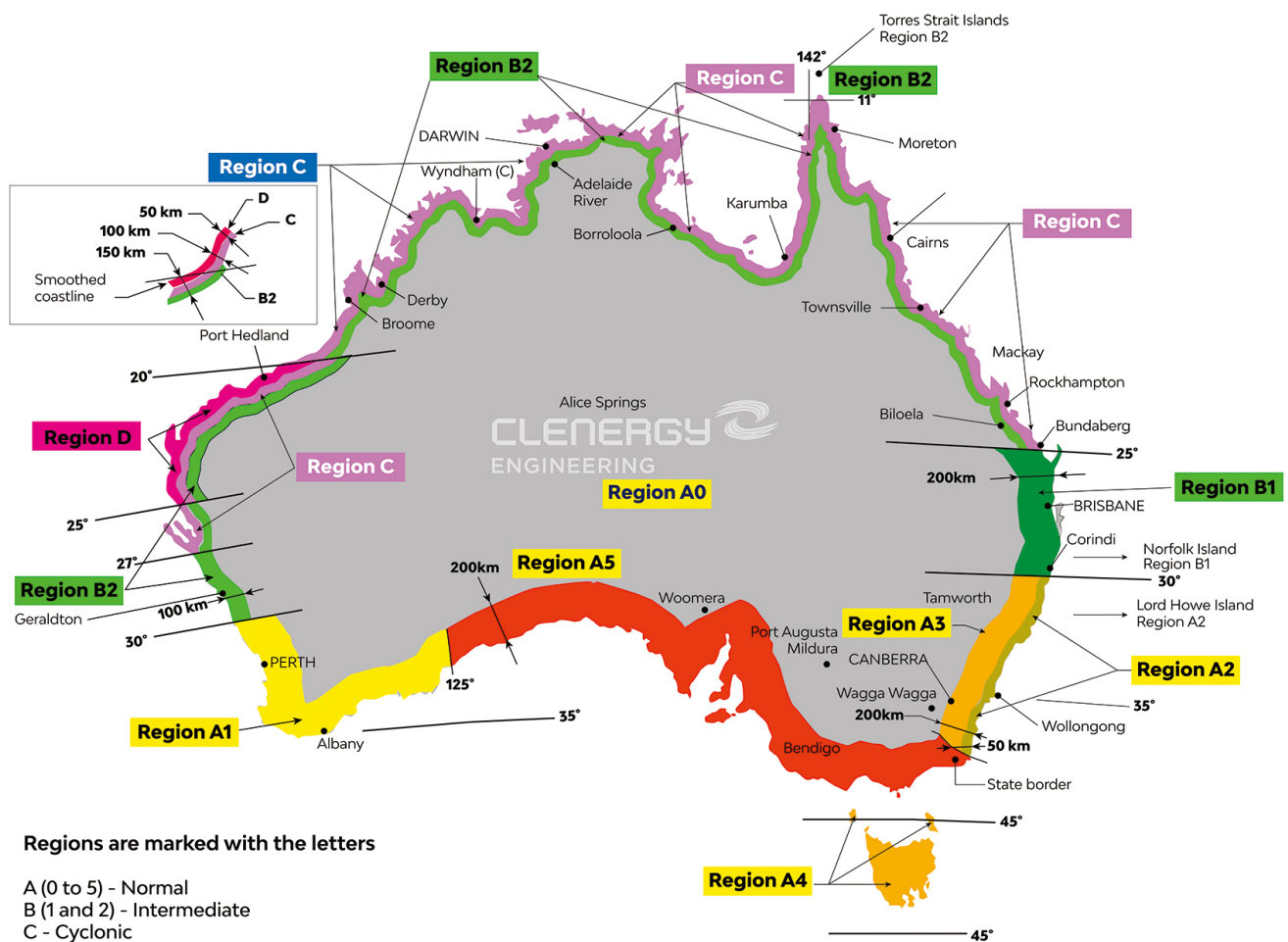
(14) Lysaght LongLine 305 (Interface: ER-I-34, ER-I-29/AU)



Note:

when using ER-I-34 for longline 305 roof sheet installation, please refer to generic note 4 in the engineering letter to apply for interface spacing reduction based on those for ER-I-29/AU.

Determine the wind region of your installation site



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

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

Determine the Terrain Category

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

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

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

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

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

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

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

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

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.

Determine the Height of the Installation Site

This document provides sufficient information for the PVezRack® 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.

Determine System Tilt Angle

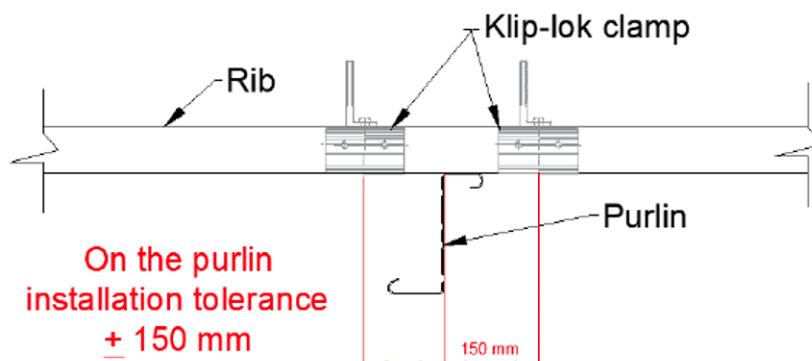
The PVezRack® Kliplok ComT system is fixed 5°, 10° and 15° tilt system.

Determine Roof slope

The PVezRack® Klip-lok ComT system can be used for roof slopes up to 5°.

Determine the Installation Area of Roof

There is an important change on the installation area of roof based on the certification letter (refer to Note 1), which is installation shall be only on top of the purlins with a maximum tolerance of 150mm. See the sketch below.



Also, the system to be installed when using this generic certification letter is limited up to 100kW or 250 panels per roof area at a given building height.

For the general installation area of roof, please refer to the notes of Certification Letter to determine it 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 Metroll Metlok 700 roof sheet, Lapjoints installation is excluded.

If your installation does not meet the requirements above, please contact Clenergy to request a project specific engineering certificate to support your installation.

Determine the Maximum Rail Support Spacing

Please refer to the Certification Letter and Interface Spacing Table. There are many factors affecting maximum interface spacing, such as wind region, building height, panel size... There is one factor specially for ComT, which is row spacing between panels. Please refer to note 22 to find out reduction and increase factors for different row spacing.

Row Spacing	Spacing +/- (North facing)	Spacing +/- (East - West)
0 to $\leq$ 200 mm	-20 %	-20 %
< 200 to < 400 mm	-10 %	-10 %
$\leq$ 400 to $\leq$ 650 mm	Apply the same table spacings	
> 650 mm	+ 20 %	+ 10 %

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

Verify Maximum Rail End Overhang

Rail end overhang in ComT installation is defined as the distance from last interface to the end of rail. Please refer to note 22 of certification letter for the details by sketch. Maximum rail overhang is 150 mm for interface fixing (or installed) spacings equal or over 700 mm. For interface fixing spacings less than 700 mm, max rail overhang is 50 mm.

Acquire PV Modules Clamping Zone Information

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

Tools and Components

Tools

				
Angle Grinder with Stone Disk	Drill Driver (for M8 Hexagon Socket Screw)	Torque Spanner	Tape Measure	String & Marker Pen
				
Spanner				

Components

				
FL-COMT/Z/G/5 Front Leg Assembly, 5°, with Z-Module and Grounding Pins	RL-COMT/Z/G/5 Rear Leg Assembly, 5°, with Z-Module and Grounding Pins	FL-COMT/Z/G/10V2 Front Leg Assembly, 10°, with Z-Module and Grounding Pins, version 2	RL-COMT/Z/G/10V2 Rear Leg Assembly, 10°, with Z-Module and Grounding Pins, version 2	FL-COMT/Z/G/15 Front Leg Assembly, 15°, with Z-Module and Grounding Pins
				
RL-E-COMT/G/15 Rear Leg Extender, 15°, with Grounding Pins	ER-R-ECO ECO-Rail	ER-SP-ECO Splice for ECO-Rail	CRC-R/ECO Cross Connector Clamp of ECO-Rail	K-CRC/PT Cross Connector Clamp and Plate Kit

 ER-I-05 Tin Interface	 ER-I-05A/EZC/ECO Tin Interface A with ezClick connection	 EZ-GL-ST/UC Grounding Lug with U-Shape Copper Channel
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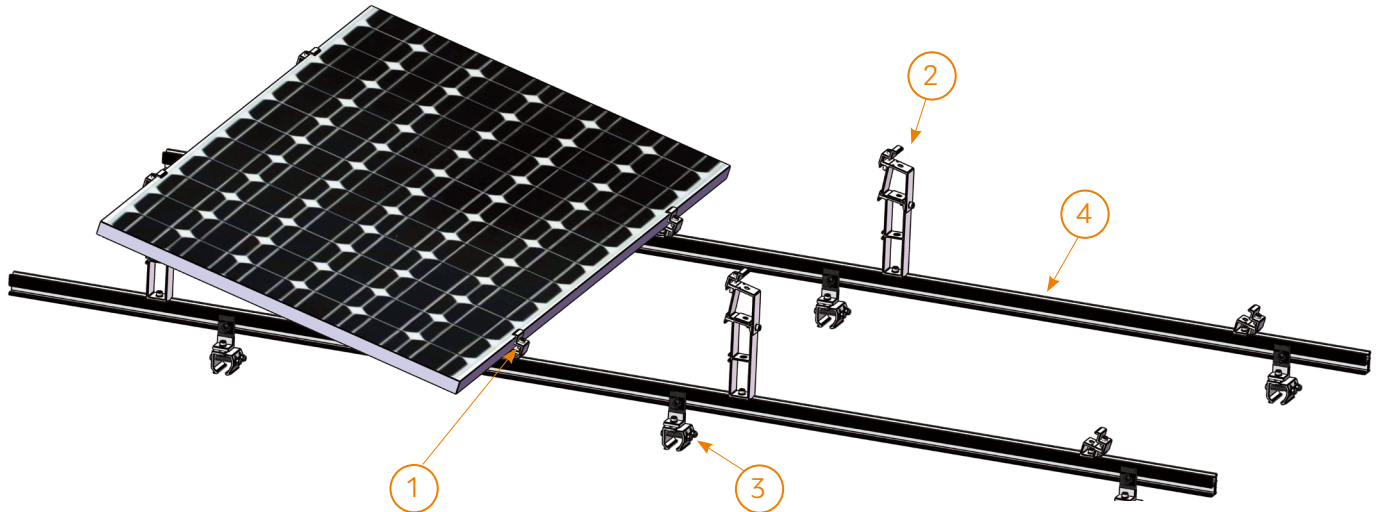
Applicable Klip-lok Interfaces

 ER-I-34 Brooklyn 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	 ER-I-34/CRC Brooklyn Klip-lok Interface pre-assembly with Cross Connector Clamp
 ER-I-34/05A/EZC Brooklyn Klip-lok Interface pre-assembly with Tin Interface A with ezClick module				

System Overview

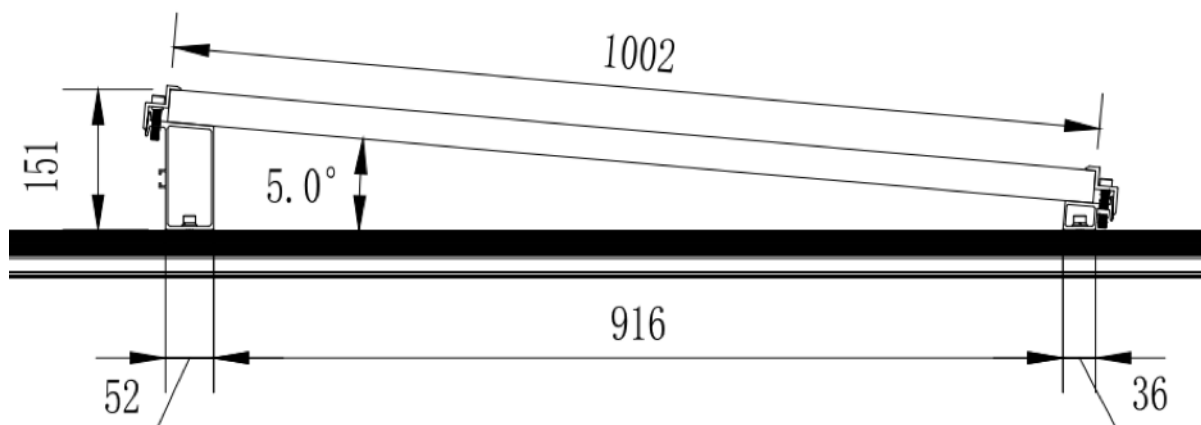
Overview of Klip-lok ComT 2.0 - North Facing

It uses Brooklyn Klip-lok interface (ER-I-34) and 15° tilt ComT 2.0 as an example for system overview below.

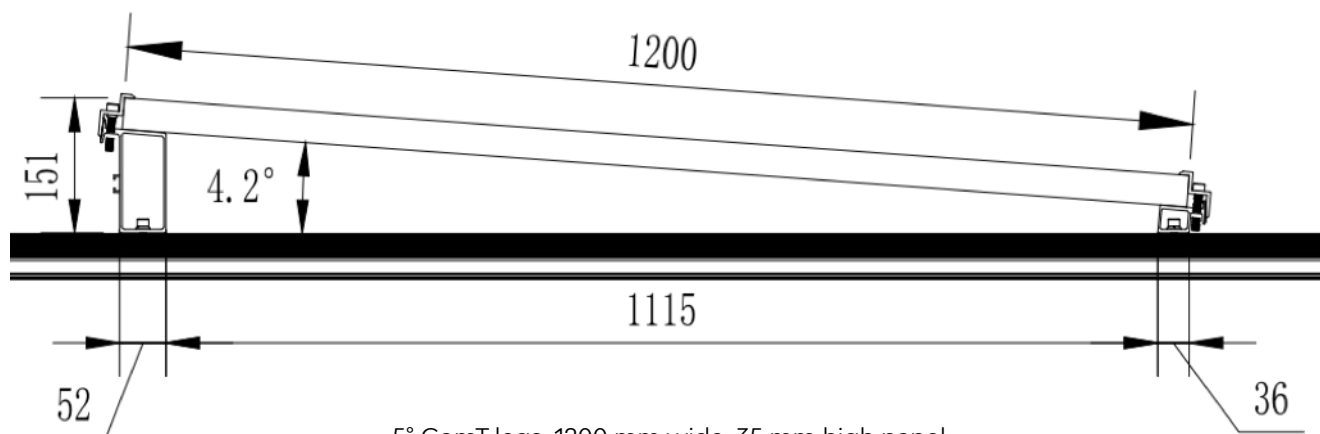


1. Front Leg Assembly 2. Rear Leg Assembly 3. Klip Lok Interface 4. ECO-Rail

Side View Drawing

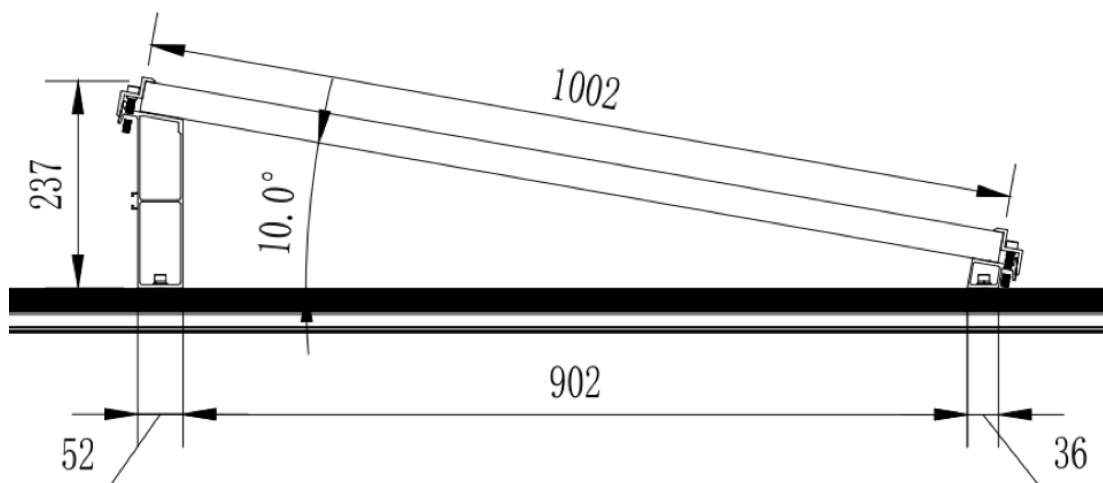


5° ComT legs, 1002 mm wide, 35 mm high panel
 Note: 5° tilt angle is designed based on 1002 mm wide panel



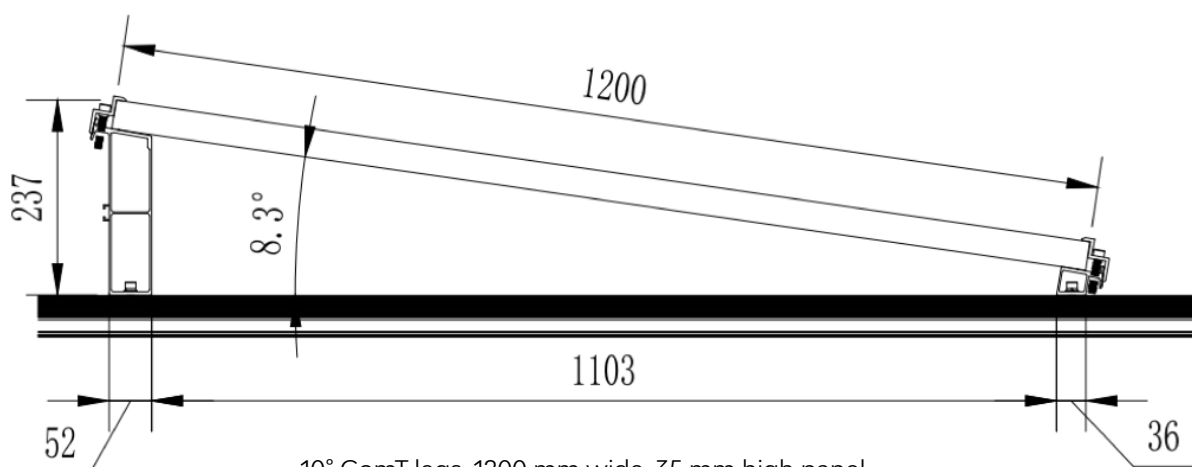
5° ComT legs, 1200 mm wide, 35 mm high panel

Note: 1200 mm wide panel is max panel width considering earthing pins on top of legs plates can provide effective panels earthing



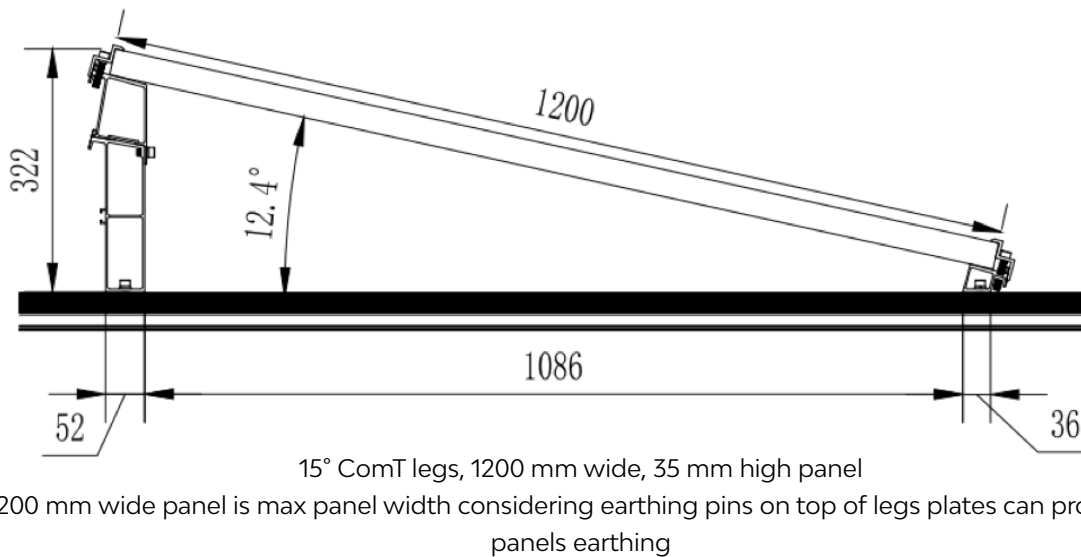
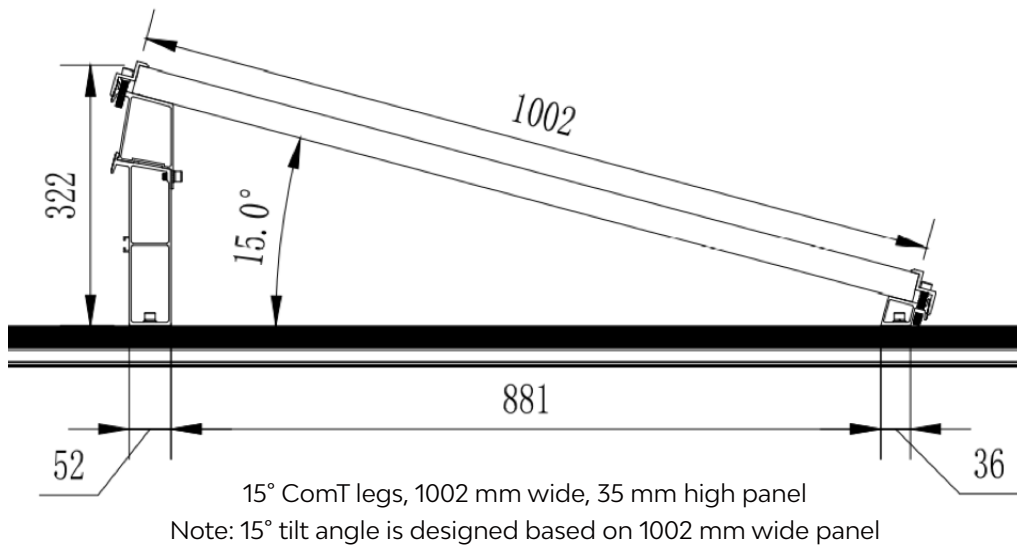
10° ComT legs, 1002 mm wide, 35 mm high panel

Note: 10° tilt angle is designed based on 1002 mm wide panel



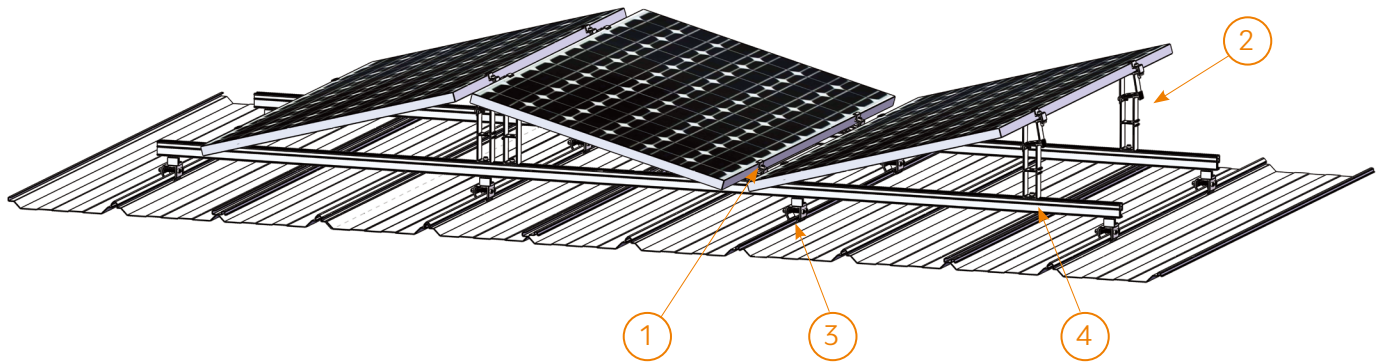
10° ComT legs, 1200 mm wide, 35 mm high panel

Note: 1200 mm wide panel is max panel width considering earthing pins on top of legs plates can provide effective panels earthing



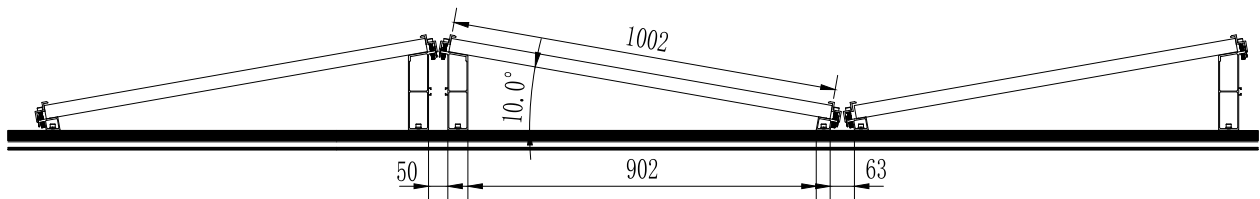
Overview of Klip-lok ComT 2.0 - East / West Facing

It uses Brooklyn Klip-lok interface (ER-I-34) and 15° tilt ComT 2.0 as an example for system overview below.



1. Front Leg Assembly 2. Rear Leg Assembly 3. Klip Lok Interface 4. ECO-Rail

Side View Drawing (10° legs, 1002 mm wide panel as an example)



Note: Minimum distance between two rear legs is 50 mm, between two front legs is 63 mm as well for 5° and 15° tilt legs, and for other panel width.

Precautions during Stainless Steel Fastener Installation

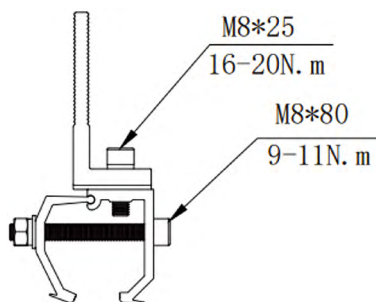
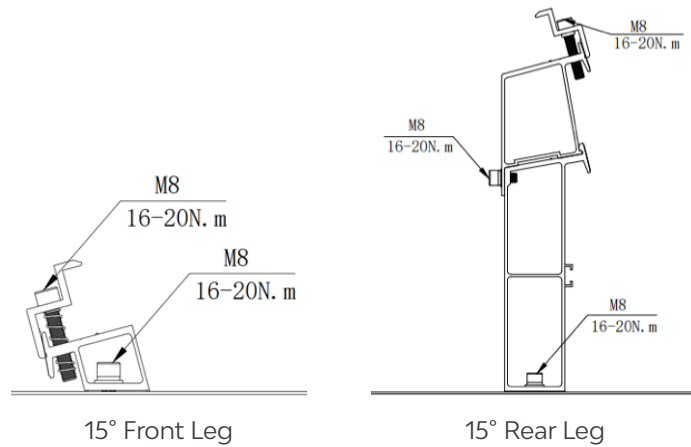
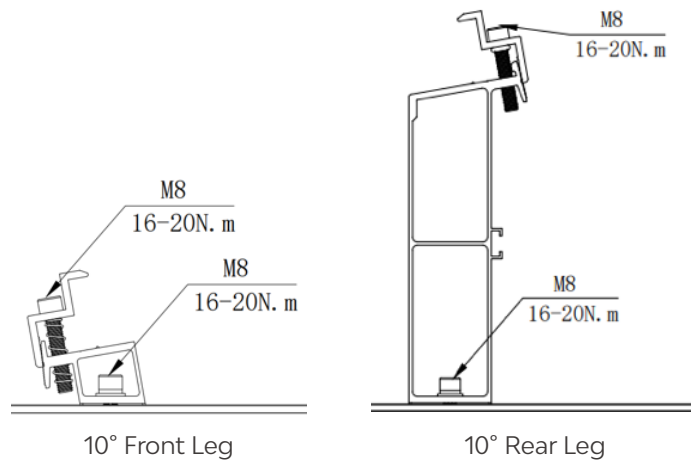
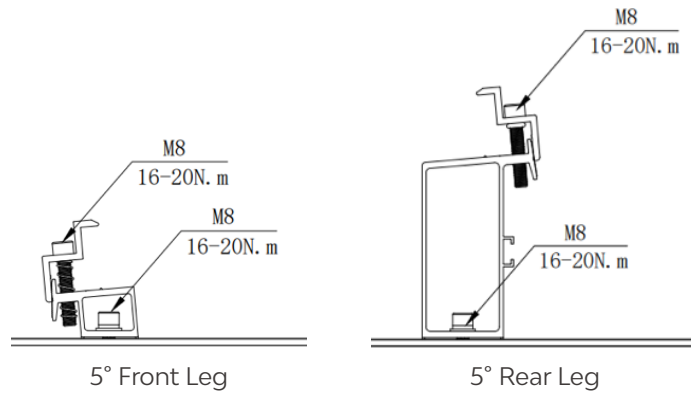
Improper operation may lead to deadlock of Nuts and Bolts. The steps below should be applied to stainless steel nut and bolt assembly to reduce this risk.

General installation instructions

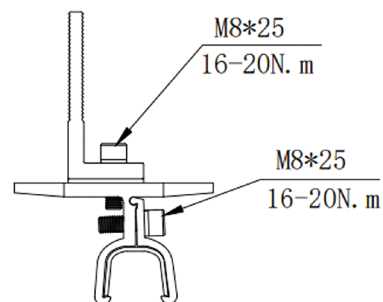
- (1) Apply force to fasteners in the direction of thread
- (2) Apply force uniformly, to maintain the required torque
- (3) Professional tools and tool belts are recommended
- (4) In some cases, fasteners could be seized over time. As an option, if want to avoid galling or seizing of thread, apply lubricant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

Safe Torques

Please refer to safe torques defined in this guide as shown in the figures below. 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.



ER-I-34 with L feet



ER-I-09 (or ER-I-32/AU, or ER-I-29/AU) with L feet

Note:

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

Installation Instructions

Klip-lok Interface Installation

Brooklyn Klip-lok Interface Installation

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

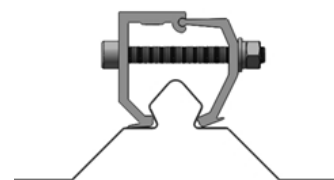


Figure 1

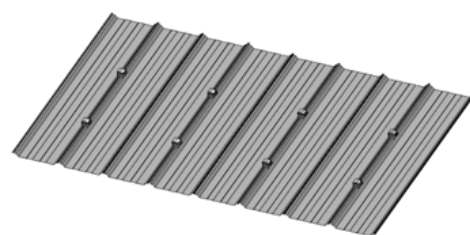


Figure 2

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.

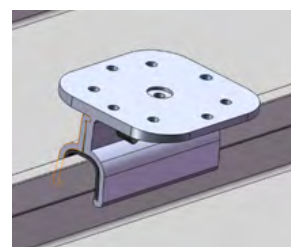


Figure 3

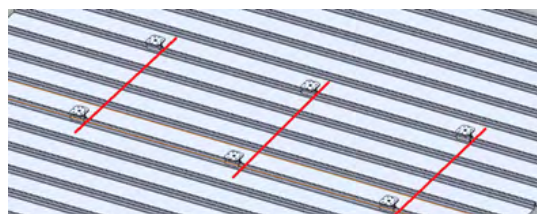


Figure 4

Tin Interface & Cross Connector Clamp with ECO-Rail Installation

Tin Interface Installation

Fix the Tin Interface on the Klip-lok Interfaces according to the installation plan.

Note:

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

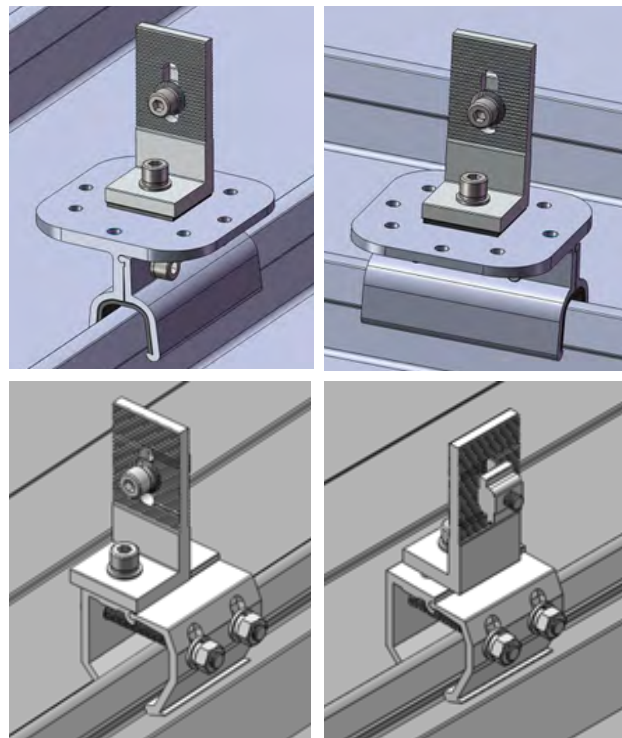
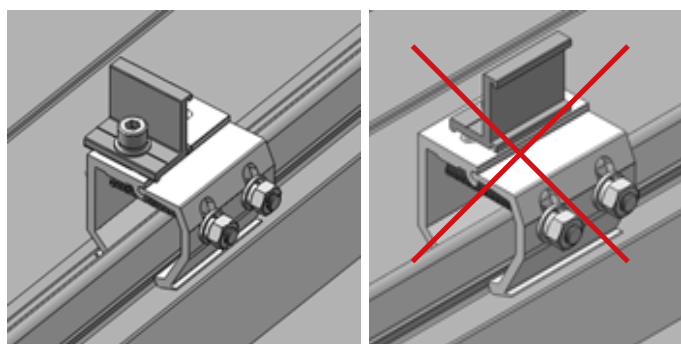


Figure 5

Cross Connector Clamp Installation

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



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

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

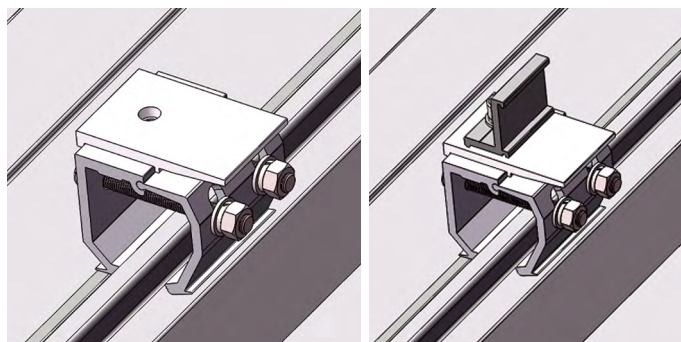


Figure 6

Fix the Rail on the Tin Interface or Cross Connector Clamp as shown in Figure 7.

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

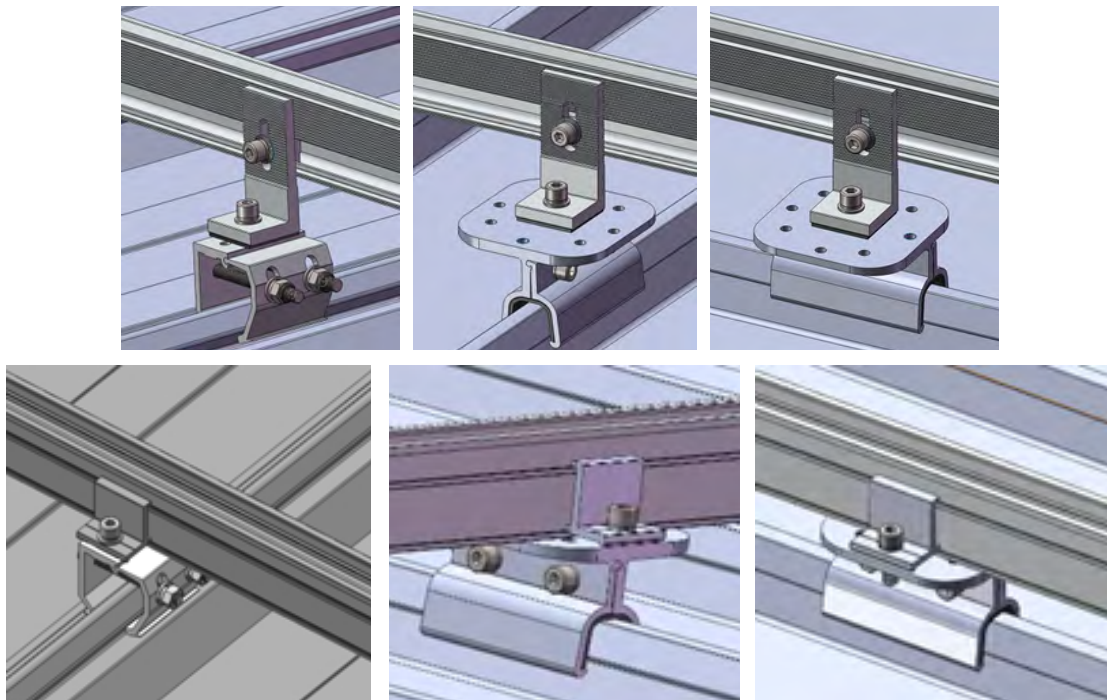


Figure 7

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 8. Tighten the second M8 Bolt using an Allen key.

Recommended torque for M8 bolts is 10-12 N.m.

Splice provides the electrical connection between the 2 rails through the pressure bolts.

This eliminates the need of using 2 earthing lugs in case of large purlin spacing.

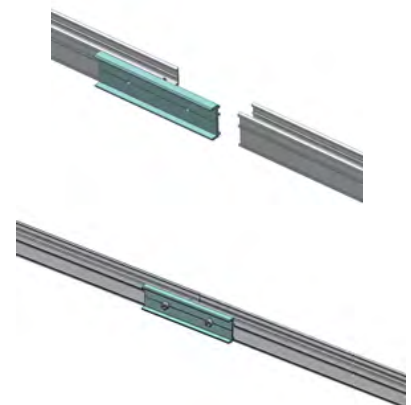


Figure 8

Front and Rear Leg Installation

Fix the Front Leg into the top channel of ECO-Rail, then fasten the Front Leg after the position is adjusted properly as shown in Figures 9 and 10.

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

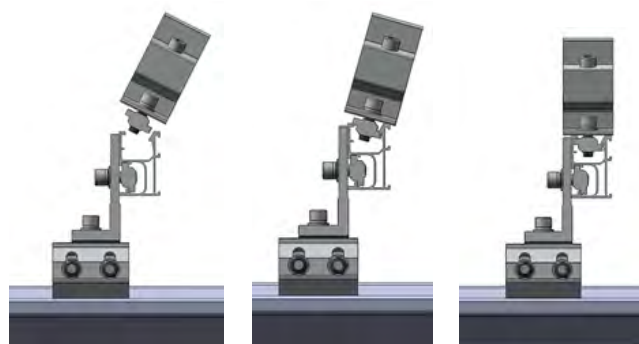


Figure 9

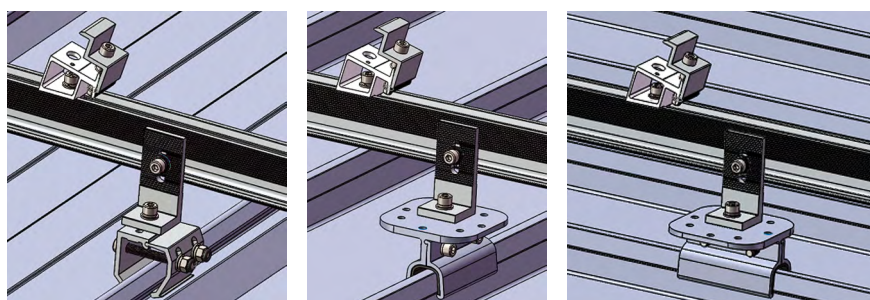


Figure 10

Fix a 5° Rear Leg into the top channel of ECO Rail, then fasten the Rear Leg after the position is adjusted properly as shown in Figure 11. Recommended torques of M8 Bolt:16-20N·m.

The same steps above applies for 10° front and rear legs installations as shown in Figures 9, 10 and 12.

Please follow steps below for 15° front and rear legs installations.

Follow Figure 9 to install a 15° front leg on top of the ECO rail.

There are two ways to install a 15° Rear Leg.

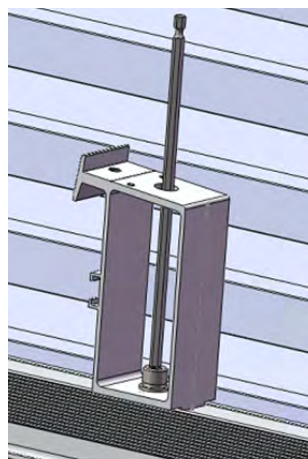


Figure 11
5° Rear Leg

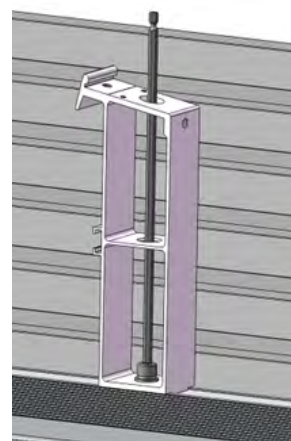


Figure 12
10° Rear Leg

Option 1:

Install 10° Rear Leg on top of the ECO rail as shown in Figure 12. Add a 15° rear leg extender on the 10° Rear Leg as shown in Figures 13-14. Don't forget to use the teeth lock washer when fastening the bolt as shown in Figure 14.

Note:

The teeth lock washer must be placed next to a 15° rear leg extender to achieve earthing continuity between from 15° rear leg extender to the 10° rear leg.

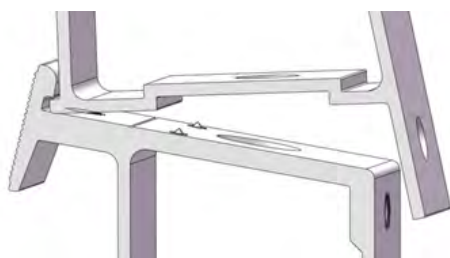


Figure 13

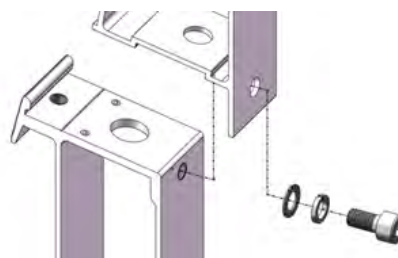


Figure 14

Option 2:

Assemble a 15° rear leg extender on a 10° rear leg before installing it on ECO rail as shown in Figure 15. The teeth lock washer must be placed for earthing continuity purpose. Then, fix the assembled 15° rear leg on ECO rail as shown in Figure 16.

Note: It is important to run visual inspection to make sure the installations above were properly done. It is important to check and correct fasteners torques with torque wrench or similar tool if using tools without torque setting during installations.

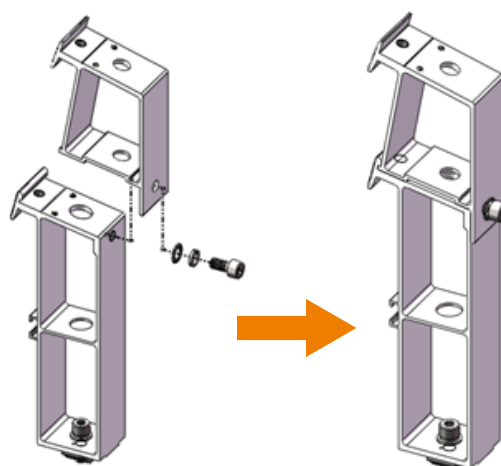


Figure 15

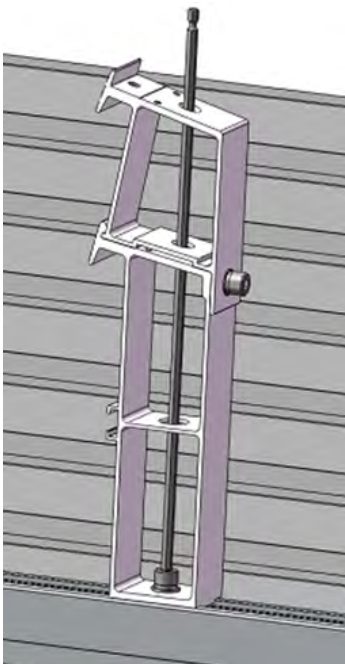


Figure 16

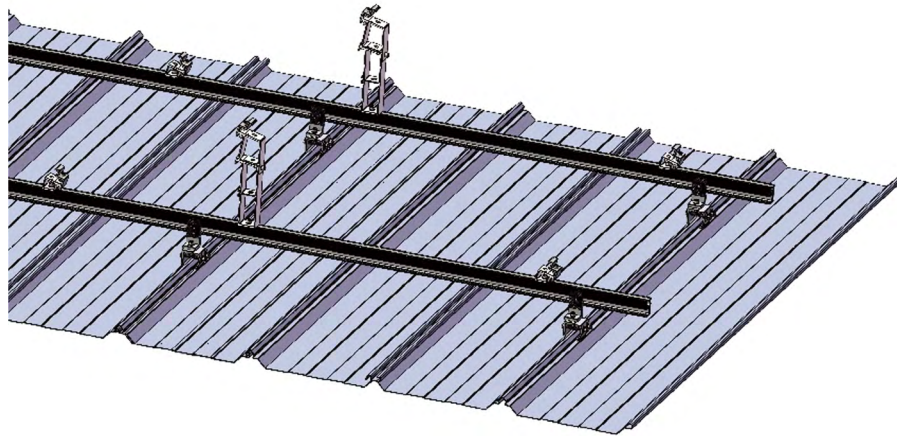


Figure 17

PV Module Installation

Place the PV Modules on the Front and Rear Leg as shown Figure 18. The outside edge of the frame of the PV Modules must overlap the marking lines on the Front and Rear Legs as shown in Figure 19. The pins of Front and Rear legs are used for creating earthing continuity from PV modules to both legs.

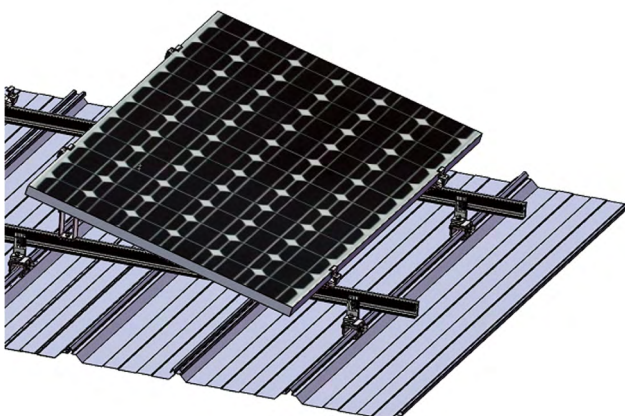


Figure 18

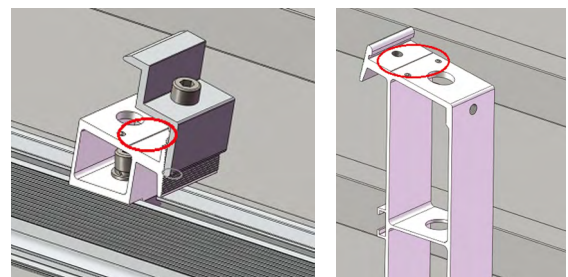


Figure 19

Fix the clamp on the Rear Leg shown in Figure 20 and fasten the clamps of Front and Rear legs till the PV Modules are properly installed in Figure 21.

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

Repeat the above steps to install other Front and Rear Legs, and PV modules.

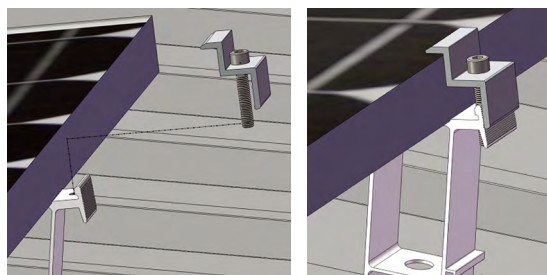


Figure 20

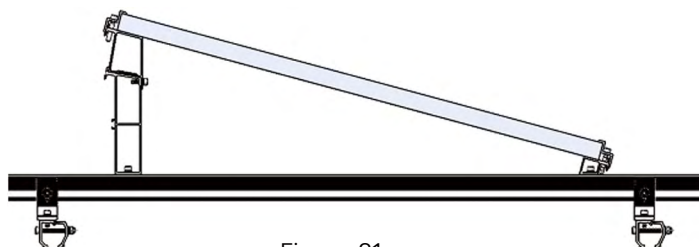


Figure 21

Grounding Lug Installation

The Clenergy provides two types of grounding lugs to meet different installation requirements, such as required earthing cable sizes. In order to meet the minimum earthing electrical resistance requirement by AS/NZS 5033:2021, it is required to install one Grounding Lug per row of rail.

A. Grounding Lug with U-shape Copper Channel (EZ-GL-ST/UC)

The recommended fasten torque of the bolt M8*25 is 16~20 N·m.

Once grounding lug fixing with rail, insert U-Shape Copper Channel into grounding lug as shown in Figure 22. Strip earthing cable (the maximum size is 10 mm²), insert the conductor into the Copper Channel and tighten the bolt M6*14 with 5~6 N·m to ensure the earthing cable is tight.

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

There are two options for Grounding Lug installation.

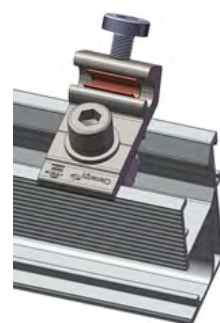


Figure 22

< Solution 1 >

Fix the Grounding Lug into the top channel of the Rail as shown in Figure 23.



Figure 23

< Solution 2 >

Fix the Grounding Lug at the side channel of Rail as shown in Figure 24.



Figure 24

B. The Austin – Commercial Grounding Lug (EZ-GL-AT)

Place the grounding lug on top of rail and ensure z module is on the right position and lug sits flush on the rail surface as shown in Figure 25. Do not fully tighten the bolt.

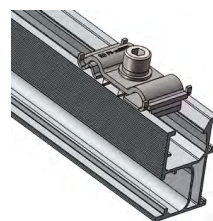


Figure 25

There are two channels to fit different earthing cables.

Channel one is for earthing cable of 4, 6, 10 and 16 mm² and channel two is for earthing cable of 25, 35, 50 mm²

Lift up one side of top plate of lug, insert the conductor of earthing cable into channel and tighten the bolt to ensure lug is well fixed on the rail and earthing cable is tight.

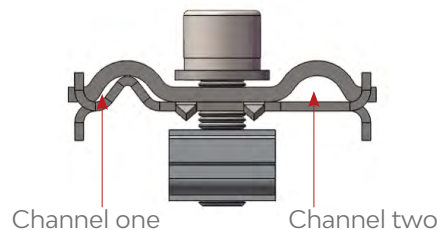
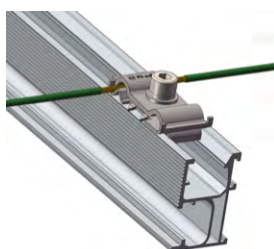


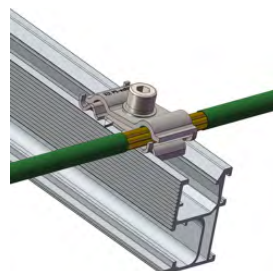
Figure 26

Note:

Please check the electrical resistance between rail and earthing cable conductor to ensure the bonding is made.



Installed in channel one



Installed in channel two

Figure 27

Certification



CIVIL & STRUCTURAL ENGINEERS
RESIDENTIAL - INDUSTRIAL - COMMERCIAL - PRODUCT DEVELOPMENT
info@mwengineering.melbourne
Phone: 1300 MWENG-0 (1300 69364-0)
www.mwengineering.melbourne
ABN 37 605 815 585

22 March 2023

Clenergy Australia
1/10 Duerdin Street
Clayton, VIC 3168

CERTIFICATION LETTER

Clenergy PV ez-Rack Klip-lok Commercial Tilt V2.0 Certification – TC2, 2.5, 3 – Wind Region A, B1, B2, C and D. Project No.: **CL-620-S-REV 2**. Internal REF: **00630**.

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

- **Wind Loads to AS 1170.2-2021**
 - o **Wind Terrain Category 2, 2.5 and 3**
 - o **Wind average recurrence of 500 years**
 - o **Wind Region A, B1 ,B2 , C and D**
- **Solar panel dimensions length up to 2.4 m and width 1.2 m**

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

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

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

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

Best Regards,

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March 2023

STRUCTURAL DESIGN CERTIFICATION



PV-ezRack® Klip-lok Commercial Tilt V2.0 Spacing Tables

According to AS/NZS 1170.2:2021

Within Australia

Terrain Category 2, 2.5 & 3

Client: Clenergy Australia

REF: 00630

Date: MARCH 2023

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REF: 00630

Client: Clenergy Australia

Internal reference: CL-620-S-REV2

Project: PV-ezRack Klip-lok Commercial Tilt 5 degrees spacing tables

Australian Standards

AS/NZS 1170.0:2002 (R2016)

General Principles

AS/NZS 1170.1:2002 (R2016)

Imposed Loadings

AS/NZS 1170.2:2021

Wind Loadings

AS/NZS 1664.1:1997-Amdt 1:1999

Aluminium

Wind Terrain Category: 2, 2.5 & 3

Wind average recurrence: 500 years

This engineering document was designed to cater for most common installation scenarios defined with an importance level 3 (500 years wind average recurrence) such as buildings and facilities where a large group of people can congregate in one area, commercial buildings, large office buildings, large commercial warehouses and multi-storey dwelling. If the project conditions do not fit on the above criteria, please contact Clenergy for an assessment.

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

Designed: AE

Date: MARCH 2023

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

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	2.009	1.366	1.025	0.683	2.009	1.366	1.025	0.683	1.938	1.292	0.969	0.646	1.864	1.243	0.932	0.621	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.232	0.821	0.616	0.411
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.109	0.741	0.557	0.371
WRC	1.185	0.790	0.592	0.395	1.185	0.790	0.592	0.395	1.028	0.685	0.514	0.343	0.789	0.526	0.394	0.263	0.694	0.462	0.347	0.231

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.975	1.317	0.988	0.658	1.901	1.267	0.950	0.634	1.817	1.212	0.909	0.606	1.762	1.175	0.881	0.587	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.263	0.842	0.632	0.421	1.224	0.816	0.612	0.408	1.106	0.738	0.553	0.369
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.141	0.760	0.571	0.382	1.102	0.737	0.554	0.369	0.997	0.666	0.501	0.334
WRC	1.075	0.717	0.537	0.358	0.965	0.643	0.483	0.322	0.855	0.570	0.428	0.285	0.680	0.453	0.340	0.227	0.619	0.413	0.309	0.206

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.910	1.273	0.955	0.637	1.771	1.181	0.886	0.590	1.706	1.137	0.853	0.569	1.678	1.119	0.839	0.559	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.232	0.821	0.616	0.411	1.122	0.748	0.561	0.374	1.059	0.706	0.530	0.353	0.981	0.654	0.490	0.327
WRB2	1.280	0.797	0.599	0.400	1.109	0.741	0.557	0.371	1.012	0.676	0.507	0.338	0.956	0.638	0.479	0.320	0.885	0.591	0.444	0.296
WRC	0.981	0.654	0.490	0.327	0.800	0.534	0.400	0.267	0.722	0.481	0.361	0.241	0.592	0.394	0.296	0.197	0.551	0.367	0.275	0.184

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.697	1.131	0.848	0.566	1.697	1.131	0.848	0.566	1.613	1.076	0.807	0.538	1.549	1.032	0.774	0.516	1.255	0.837	0.628	0.418
WRB1	1.106	0.738	0.553	0.369	1.106	0.738	0.553	0.369	0.949	0.633	0.475	0.316	0.847	0.565	0.424	0.282	0.745	0.497	0.373	0.248
WRB2	0.997	0.666	0.500	0.334	0.997	0.666	0.500	0.334	0.856	0.572	0.429	0.286	0.765	0.510	0.383	0.255	0.673	0.449	0.337	0.225
WRC	0.714	0.476	0.357	0.238	0.714	0.476	0.357	0.238	0.612	0.408	0.306	0.204	0.476	0.317	0.238	0.159	0.422	0.281	0.211	0.141

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.641	1.094	0.821	0.547	1.586	1.057	0.793	0.529	1.511	1.008	0.756	0.504	1.474	0.983	0.759	0.506	1.153	0.769	0.577	0.384
WRB1	0.996	0.664	0.498	0.332	0.894	0.596	0.447	0.298	0.792	0.528	0.396	0.264	0.730	0.486	0.365	0.243	0.659	0.439	0.330	0.220
WRB2	0.899	0.600	0.450	0.300	0.807	0.539	0.405	0.270	0.715	0.478	0.359	0.239	0.659	0.440	0.330	0.220	0.595	0.397	0.298	0.200
WRC	0.643	0.429	0.322	0.214	0.581	0.387	0.290	0.194	0.518	0.345	0.259	0.173	0.408	0.272	0.204	0.136	0.374	0.249	0.187	0.125

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.586	1.057	0.793	0.529	1.484	0.989	0.742	0.509	1.391	0.955	0.716	0.477	1.307	0.897	0.673	0.449	1.028	0.685	0.514	0.343
WRB1	0.910	0.607	0.455	0.303	0.745	0.497	0.373	0.248	0.675	0.450	0.337	0.225	0.636	0.424	0.318	0.212	0.588	0.392	0.294	0.196
WRB2	0.821	0.548	0.412	0.275	0.673	0.449	0.337	0.225	0.610	0.407	0.305	0.204	0.574	0.383	0.288	0.192	0.532	0.356	0.267	0.178
WRC	0.588	0.392	0.294	0.196	0.486	0.324	0.243	0.162	0.439	0.293	0.220	0.146	0.360	0.240	0.180	0.120	0.333	0.222	0.167	0.111

LYSAGHT KLIP-LOK 700 CLASSIC (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.521	1.014	0.760	0.507	1.521	1.014	0.760	0.507	1.437	0.958	0.719	0.479	1.280	0.853	0.640	0.427	0.949	0.633	0.475	0.316
WRB1	0.800	0.534	0.400	0.267	0.800	0.534	0.400	0.267	0.690	0.460	0.345	0.230	0.620	0.413	0.310	0.207	0.549	0.366	0.275	0.183
WRB2	0.721	0.482	0.362	0.241	0.721	0.482	0.362	0.241	0.623	0.416	0.312	0.208	0.559	0.373	0.281	0.187	0.496	0.331	0.248	0.166
WRC	0.518	0.345	0.259	0.173	0.518	0.345	0.259	0.173	0.447	0.298	0.224	0.149	0.347	0.231	0.173	0.116	0.306	0.204	0.153	0.102

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.474	0.983	0.737	0.491	1.354	0.903	0.677	0.451	1.196	0.797	0.598	0.399	1.094	0.729	0.547	0.365	0.840	0.560	0.420	0.280
WRB1	0.730	0.486	0.365	0.243	0.651	0.434	0.326	0.217	0.581	0.387	0.290	0.194	0.534	0.356	0.267	0.178	0.486	0.324	0.243	0.162
WRB2	0.658	0.439	0.330	0.220	0.588	0.392	0.295	0.196	0.524	0.350	0.263	0.175	0.482	0.322	0.241	0.161	0.439	0.293	0.220	0.147
WRC	0.471	0.314	0.235	0.157	0.424	0.282	0.212	0.141	0.377	0.251	0.188	0.126	0.299	0.199	0.150	0.100	0.272	0.181	0.136	0.091

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.372	0.915	0.686	0.457	1.122	0.748	0.561	0.374	1.011	0.674	0.505	0.337	0.955	0.637	0.478	0.318	0.745	0.497	0.373	0.248
WRB1	0.659	0.439	0.330	0.220	0.549	0.366	0.275	0.183	0.494	0.330	0.247	0.165	0.463	0.309	0.231	0.154	0.432	0.288	0.216	0.144
WRB2	0.594	0.397	0.298	0.199	0.496	0.331	0.248	0.166	0.447	0.298	0.224	0.149	0.418	0.279	0.210	0.140	0.390	0.261	0.196	0.130
WRC	0.432	0.288	0.216	0.144	0.353	0.235	0.177	0.118	0.322	0.214	0.161	0.107	0.265	0.177	0.133	0.088	0.245	0.163	0.122	0.082

PV-ezRack Commercial Tilt interface spacing table for

LYSAGHT KLIP-LOK 700 CLASSIC (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.215	0.810	0.607	0.405	1.215	0.810	0.607	0.405	1.048	0.699	0.524	0.349	0.937	0.624	0.468	0.312	0.698	0.466	0.349	0.233
WRB1	0.588	0.392	0.294	0.196	0.588	0.392	0.294	0.196	0.510	0.340	0.255	0.170	0.463	0.309	0.231	0.154	0.408	0.272	0.204	0.136
WRB2	0.531	0.354	0.266	0.178	0.531	0.354	0.266	0.178	0.461	0.308	0.231	0.154	0.418	0.279	0.209	0.140	0.369	0.246	0.184	0.123
WRC	0.384	0.256	0.192	0.128	0.384	0.256	0.192	0.128	0.337	0.225	0.169	0.112	0.258	0.172	0.129	0.086	0.231	0.154	0.116	0.077

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.094	0.729	0.547	0.365	0.992	0.661	0.496	0.331	0.872	0.581	0.436	0.291	0.807	0.538	0.403	0.269	0.620	0.413	0.310	0.207
WRB1	0.534	0.356	0.267	0.178	0.486	0.324	0.243	0.162	0.432	0.288	0.216	0.144	0.400	0.267	0.200	0.133	0.361	0.241	0.180	0.120
WRB2	0.482	0.321	0.241	0.161	0.439	0.293	0.220	0.147	0.390	0.261	0.195	0.130	0.361	0.241	0.181	0.121	0.326	0.218	0.163	0.109
WRC	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.282	0.188	0.141	0.094	0.224	0.150	0.112	0.075	0.204	0.136	0.102	0.068

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.001	0.668	0.501	0.334	0.825	0.550	0.413	0.275	0.742	0.495	0.371	0.247	0.705	0.470	0.352	0.235	0.549	0.366	0.275	0.183
WRB1	0.486	0.324	0.243	0.162	0.408	0.272	0.204	0.136	0.369	0.246	0.184	0.123	0.345	0.230	0.173	0.115	0.322	0.214	0.161	0.107
WRB2	0.439	0.293	0.220	0.147	0.369	0.246	0.184	0.123	0.334	0.223	0.167	0.111	0.312	0.208	0.157	0.104	0.291	0.194	0.146	0.097
WRC	0.322	0.214	0.161	0.107	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.197	0.131	0.099	0.066	0.184	0.122	0.092	0.061

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	2.009	1.366	1.025	0.683	2.009	1.366	1.025	0.683	1.938	1.292	0.969	0.646	1.864	1.243	0.932	0.621	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.153	0.769	0.577	0.384
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.039	0.694	0.521	0.348
WRC	1.091	0.727	0.545	0.364	1.091	0.727	0.545	0.364	0.942	0.628	0.471	0.314	0.728	0.485	0.364	0.243	0.639	0.426	0.320	0.213

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.975	1.317	0.988	0.658	1.901	1.267	0.950	0.634	1.817	1.212	0.909	0.606	1.762	1.175	0.881	0.587	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.232	0.821	0.616	0.411	1.130	0.753	0.565	0.377	1.012	0.675	0.506	0.337
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.113	0.741	0.557	0.372	1.017	0.680	0.511	0.341	0.912	0.609	0.458	0.306
WRC	0.989	0.659	0.494	0.330	0.887	0.591	0.443	0.296	0.785	0.523	0.392	0.262	0.626	0.417	0.313	0.209	0.564	0.376	0.282	0.188

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.910	1.273	0.955	0.637	1.771	1.181	0.886	0.590	1.706	1.137	0.853	0.569	1.678	1.119	0.839	0.559	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.153	0.769	0.577	0.384	1.036	0.690	0.518	0.345	0.973	0.649	0.486	0.324	0.902	0.602	0.451	0.301
WRB2	1.280	0.797	0.599	0.400	1.039	0.694	0.521	0.348	0.934	0.624	0.468	0.312	0.878	0.586	0.440	0.294	0.814	0.544	0.408	0.273
WRC	0.902	0.602	0.451	0.301	0.738	0.492	0.369	0.246	0.667	0.445	0.333	0.222	0.544	0.363	0.272	0.181	0.503	0.335	0.252	0.168

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.697	1.131	0.848	0.566	1.697	1.131	0.848	0.566	1.613	1.076	0.807	0.538	1.549	1.032	0.774	0.516	1.208	0.806	0.604	0.403
WRB1	1.020	0.680	0.510	0.340	1.020	0.680	0.510	0.340	0.879	0.586	0.439	0.293	0.785	0.523	0.392	0.262	0.690	0.460	0.345	0.230
WRB2	0.919	0.614	0.461	0.308	0.919	0.614	0.461	0.308	0.792	0.529	0.397	0.265	0.708	0.473	0.355	0.236	0.623	0.416	0.312	0.209
WRC	0.651	0.434	0.326	0.217	0.651	0.434	0.326	0.217	0.565	0.377	0.282	0.188	0.435	0.290	0.218	0.145	0.388	0.258	0.194	0.129

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.641	1.094	0.821	0.547	1.586	1.057	0.793	0.529	1.511	1.008	0.756	0.504	1.391	0.927	0.695	0.464	1.059	0.706	0.530	0.353
WRB1	0.918	0.612	0.459	0.306	0.824	0.549	0.412	0.275	0.730	0.486	0.365	0.243	0.675	0.450	0.337	0.225	0.612	0.408	0.306	0.204
WRB2	0.828	0.553	0.415	0.277	0.743	0.496	0.373	0.248	0.658	0.440	0.331	0.220	0.609	0.407	0.305	0.203	0.553	0.369	0.277	0.185
WRC	0.596	0.398	0.298	0.199	0.534	0.356	0.267	0.178	0.471	0.314	0.235	0.157	0.381	0.254	0.190	0.127	0.340	0.227	0.170	0.113

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.586	1.057	0.793	0.529	1.428	0.952	0.714	0.476	1.280	0.853	0.640	0.427	1.205	0.804	0.603	0.402	0.949	0.633	0.475	0.316
WRB1	0.840	0.560	0.420	0.280	0.690	0.460	0.345	0.230	0.620	0.413	0.310	0.207	0.588	0.392	0.294	0.196	0.541	0.361	0.271	0.180
WRB2	0.757	0.506	0.380	0.253	0.623	0.416	0.312	0.209	0.560	0.374	0.281	0.187	0.532	0.355	0.267	0.178	0.489	0.327	0.245	0.163
WRC	0.541	0.361	0.271	0.180	0.447	0.298	0.224	0.149	0.400	0.267	0.200	0.133	0.333	0.222	0.167	0.111	0.306	0.204	0.153	0.102

PV-ezRack Commercial Tilt interface spacing table for

LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.521	1.014	0.760	0.507	1.521	1.014	0.760	0.507	1.326	0.884	0.663	0.442	1.178	0.785	0.589	0.393	0.871	0.581	0.435	0.290
WRB1	0.738	0.492	0.369	0.246	0.738	0.492	0.369	0.246	0.636	0.424	0.318	0.212	0.573	0.382	0.286	0.191	0.502	0.335	0.251	0.167
WRB2	0.664	0.444	0.334	0.223	0.664	0.444	0.334	0.223	0.573	0.383	0.287	0.192	0.517	0.345	0.259	0.173	0.453	0.302	0.227	0.152
WRC	0.479	0.319	0.239	0.160	0.479	0.319	0.239	0.160	0.416	0.277	0.208	0.139	0.320	0.213	0.160	0.107	0.286	0.190	0.143	0.095

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.391	0.927	0.695	0.464	1.243	0.828	0.621	0.414	1.103	0.736	0.552	0.368	1.011	0.674	0.505	0.337	0.769	0.513	0.384	0.256
WRB1	0.667	0.445	0.333	0.222	0.604	0.403	0.302	0.201	0.534	0.356	0.267	0.178	0.494	0.330	0.247	0.165	0.447	0.298	0.224	0.149
WRB2	0.602	0.402	0.301	0.201	0.545	0.364	0.273	0.182	0.481	0.322	0.242	0.161	0.446	0.298	0.223	0.149	0.404	0.270	0.203	0.135
WRC	0.432	0.288	0.216	0.144	0.392	0.262	0.196	0.131	0.345	0.230	0.173	0.115	0.279	0.186	0.139	0.093	0.252	0.168	0.126	0.084

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.261	0.841	0.631	0.420	1.029	0.686	0.515	0.343	0.927	0.618	0.464	0.309	0.881	0.587	0.440	0.294	0.690	0.460	0.345	0.230
WRB1	0.612	0.408	0.306	0.204	0.502	0.335	0.251	0.167	0.455	0.303	0.228	0.152	0.432	0.288	0.216	0.144	0.400	0.267	0.200	0.133
WRB2	0.552	0.369	0.277	0.185	0.453	0.302	0.227	0.152	0.411	0.274	0.206	0.138	0.390	0.260	0.196	0.131	0.362	0.242	0.181	0.121
WRC	0.400	0.267	0.200	0.133	0.330	0.220	0.165	0.110	0.298	0.199	0.149	0.099	0.245	0.163	0.122	0.082	0.224	0.150	0.112	0.075

PV-ezRack Commercial Tilt interface spacing table for

LYSAGHT KLIP-LOK 700 HI-STRENGTH (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.113	0.742	0.556	0.371	1.113	0.742	0.556	0.371	0.964	0.643	0.482	0.321	0.862	0.575	0.431	0.287	0.643	0.429	0.322	0.214
WRB1	0.541	0.361	0.271	0.180	0.541	0.361	0.271	0.180	0.471	0.314	0.235	0.157	0.424	0.282	0.212	0.141	0.377	0.251	0.188	0.126
WRB2	0.489	0.326	0.245	0.163	0.489	0.326	0.245	0.163	0.425	0.284	0.213	0.142	0.383	0.256	0.191	0.128	0.340	0.227	0.170	0.114
WRC	0.353	0.235	0.177	0.118	0.353	0.235	0.177	0.118	0.306	0.204	0.153	0.102	0.238	0.159	0.119	0.079	0.211	0.141	0.105	0.070

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.011	0.674	0.505	0.337	0.909	0.606	0.454	0.303	0.807	0.538	0.403	0.269	0.742	0.495	0.371	0.247	0.573	0.382	0.286	0.191
WRB1	0.494	0.330	0.247	0.165	0.447	0.298	0.224	0.149	0.400	0.267	0.200	0.133	0.369	0.246	0.184	0.123	0.330	0.220	0.165	0.110
WRB2	0.446	0.298	0.224	0.149	0.404	0.269	0.202	0.135	0.362	0.242	0.181	0.121	0.333	0.223	0.167	0.111	0.298	0.199	0.149	0.099
WRC	0.322	0.214	0.161	0.107	0.290	0.194	0.145	0.097	0.259	0.173	0.129	0.086	0.211	0.141	0.105	0.070	0.190	0.127	0.095	0.063

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.918	0.612	0.459	0.306	0.760	0.507	0.380	0.253	0.686	0.457	0.343	0.229	0.649	0.433	0.325	0.216	0.510	0.340	0.255	0.170
WRB1	0.455	0.303	0.228	0.152	0.377	0.251	0.188	0.126	0.337	0.225	0.169	0.112	0.322	0.214	0.161	0.107	0.298	0.199	0.149	0.099
WRB2	0.411	0.275	0.206	0.137	0.340	0.227	0.170	0.114	0.305	0.204	0.153	0.102	0.291	0.194	0.146	0.097	0.270	0.180	0.135	0.090
WRC	0.298	0.199	0.149	0.099	0.243	0.162	0.122	0.081	0.220	0.146	0.110	0.073	0.184	0.122	0.092	0.061	0.170	0.113	0.085	0.057

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-32/AU
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	2.009	1.366	1.025	0.683	2.009	1.366	1.025	0.683	1.938	1.292	0.969	0.646	1.864	1.243	0.932	0.621	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.232	0.821	0.616	0.411
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.109	0.741	0.557	0.371
WRC	1.216	0.811	0.608	0.405	1.216	0.811	0.608	0.405	1.153	0.769	0.577	0.384	0.966	0.644	0.483	0.322	0.877	0.585	0.439	0.292

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.975	1.317	0.988	0.658	1.901	1.267	0.950	0.634	1.817	1.212	0.909	0.606	1.762	1.175	0.881	0.587	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.263	0.842	0.632	0.421	1.224	0.816	0.612	0.408	1.185	0.790	0.592	0.395
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.141	0.760	0.571	0.382	1.102	0.737	0.554	0.369	1.067	0.713	0.536	0.358
WRC	1.177	0.785	0.588	0.392	1.138	0.781	0.586	0.390	1.107	0.703	0.527	0.351	0.857	0.571	0.428	0.286	0.775	0.517	0.388	0.258

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.910	1.273	0.955	0.637	1.771	1.181	0.886	0.590	1.706	1.137	0.853	0.569	1.678	1.119	0.839	0.559	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.232	0.821	0.616	0.411	1.193	0.795	0.596	0.398	1.169	0.779	0.585	0.390	1.138	0.781	0.586	0.390
WRB2	1.280	0.797	0.599	0.400	1.109	0.741	0.557	0.371	1.075	0.719	0.539	0.360	1.055	0.704	0.529	0.353	1.027	0.706	0.530	0.354
WRC	1.138	0.758	0.586	0.390	0.992	0.662	0.496	0.331	0.937	0.595	0.446	0.297	0.748	0.499	0.374	0.249	0.694	0.462	0.347	0.231

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-32/AU
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.697	1.131	0.848	0.566	1.697	1.131	0.848	0.566	1.613	1.076	0.807	0.538	1.549	1.032	0.774	0.516	1.255	0.837	0.628	0.418
WRB1	1.185	0.790	0.592	0.395	1.185	0.790	0.592	0.395	1.130	0.753	0.565	0.377	1.067	0.732	0.549	0.366	0.942	0.646	0.485	0.323
WRB2	1.067	0.713	0.536	0.357	1.067	0.713	0.536	0.357	1.019	0.680	0.511	0.341	0.963	0.662	0.497	0.331	0.850	0.584	0.438	0.293
WRC	0.894	0.596	0.447	0.298	0.894	0.596	0.447	0.298	0.777	0.518	0.388	0.267	0.598	0.399	0.299	0.199	0.530	0.354	0.265	0.177

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.641	1.094	0.821	0.547	1.586	1.057	0.793	0.529	1.511	1.008	0.756	0.504	1.474	0.983	0.759	0.506	1.200	0.800	0.600	0.400
WRB1	1.146	0.764	0.573	0.382	1.106	0.738	0.569	0.380	1.004	0.689	0.517	0.345	0.918	0.630	0.473	0.315	0.832	0.571	0.428	0.285
WRB2	1.033	0.690	0.518	0.345	0.998	0.667	0.515	0.343	0.906	0.624	0.468	0.312	0.829	0.570	0.427	0.285	0.751	0.516	0.388	0.259
WRC	0.808	0.539	0.404	0.269	0.730	0.486	0.365	0.243	0.651	0.434	0.326	0.217	0.517	0.345	0.258	0.172	0.469	0.313	0.235	0.156

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.586	1.057	0.793	0.529	1.484	0.989	0.742	0.509	1.470	0.980	0.735	0.467	1.373	0.915	0.686	0.458	1.153	0.769	0.577	0.384
WRB1	1.114	0.743	0.557	0.382	0.942	0.646	0.485	0.323	0.847	0.582	0.436	0.291	0.800	0.549	0.412	0.275	0.767	0.512	0.384	0.256
WRB2	1.005	0.671	0.504	0.346	0.850	0.584	0.438	0.293	0.766	0.526	0.395	0.264	0.723	0.497	0.373	0.249	0.694	0.464	0.348	0.231
WRC	0.738	0.492	0.369	0.246	0.612	0.408	0.306	0.204	0.549	0.366	0.275	0.183	0.449	0.299	0.224	0.150	0.422	0.281	0.211	0.141

LYSAGHT KLIP-LOK 406 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-32/AU
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.521	1.014	0.760	0.507	1.521	1.014	0.760	0.507	1.447	0.964	0.723	0.482	1.391	0.927	0.695	0.464	1.130	0.753	0.565	0.377
WRB1	1.012	0.675	0.506	0.337	1.012	0.675	0.506	0.337	0.871	0.581	0.435	0.290	0.785	0.523	0.392	0.262	0.690	0.460	0.345	0.230
WRB2	0.912	0.609	0.458	0.305	0.912	0.609	0.458	0.305	0.785	0.524	0.394	0.263	0.708	0.473	0.355	0.236	0.623	0.416	0.312	0.209
WRC	0.651	0.434	0.326	0.217	0.651	0.434	0.326	0.217	0.565	0.377	0.282	0.188	0.442	0.295	0.221	0.147	0.388	0.258	0.194	0.129

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.474	0.983	0.737	0.491	1.419	0.946	0.709	0.473	1.363	0.909	0.682	0.454	1.326	0.884	0.663	0.442	1.059	0.706	0.530	0.353
WRB1	0.918	0.612	0.459	0.306	0.824	0.549	0.412	0.275	0.730	0.486	0.365	0.243	0.675	0.450	0.337	0.225	0.612	0.408	0.306	0.204
WRB2	0.828	0.553	0.415	0.277	0.743	0.496	0.373	0.248	0.658	0.440	0.331	0.220	0.609	0.407	0.305	0.203	0.553	0.369	0.277	0.185
WRC	0.596	0.398	0.298	0.199	0.534	0.356	0.267	0.178	0.479	0.319	0.239	0.160	0.381	0.254	0.190	0.127	0.347	0.231	0.173	0.116

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.428	0.952	0.714	0.476	1.335	0.890	0.668	0.445	1.270	0.847	0.635	0.423	1.205	0.804	0.603	0.402	0.942	0.628	0.471	0.314
WRB1	0.832	0.554	0.416	0.277	0.690	0.460	0.345	0.230	0.620	0.413	0.310	0.207	0.588	0.392	0.294	0.196	0.541	0.361	0.271	0.180
WRB2	0.750	0.501	0.376	0.251	0.623	0.416	0.312	0.209	0.560	0.374	0.281	0.187	0.532	0.355	0.267	0.178	0.489	0.327	0.245	0.163
WRC	0.541	0.361	0.271	0.180	0.447	0.298	0.224	0.149	0.408	0.272	0.204	0.136	0.333	0.222	0.167	0.111	0.306	0.204	0.153	0.102

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-32/AU
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.363	0.909	0.682	0.454	1.363	0.909	0.682	0.454	1.298	0.865	0.649	0.433	1.178	0.785	0.589	0.393	0.879	0.586	0.439	0.293
WRB1	0.745	0.497	0.373	0.248	0.745	0.497	0.373	0.248	0.643	0.429	0.322	0.214	0.581	0.387	0.290	0.194	0.510	0.340	0.255	0.170
WRB2	0.673	0.449	0.337	0.225	0.673	0.449	0.337	0.225	0.581	0.388	0.291	0.194	0.525	0.350	0.262	0.176	0.461	0.308	0.230	0.154
WRC	0.486	0.324	0.243	0.162	0.486	0.324	0.243	0.162	0.424	0.282	0.212	0.141	0.326	0.218	0.163	0.109	0.292	0.195	0.146	0.097

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.326	0.884	0.663	0.442	1.243	0.828	0.621	0.414	1.103	0.736	0.552	0.368	1.020	0.680	0.510	0.340	0.777	0.518	0.388	0.259
WRB1	0.675	0.450	0.337	0.225	0.612	0.408	0.306	0.204	0.541	0.361	0.271	0.180	0.502	0.335	0.251	0.167	0.455	0.303	0.228	0.152
WRB2	0.609	0.406	0.305	0.203	0.552	0.369	0.277	0.185	0.489	0.327	0.245	0.164	0.454	0.303	0.227	0.152	0.412	0.274	0.206	0.137
WRC	0.439	0.293	0.220	0.146	0.400	0.267	0.200	0.133	0.353	0.235	0.177	0.118	0.286	0.190	0.143	0.095	0.258	0.172	0.129	0.086

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.261	0.841	0.631	0.420	1.039	0.692	0.519	0.346	0.937	0.624	0.468	0.312	0.881	0.587	0.440	0.294	0.698	0.466	0.349	0.233
WRB1	0.620	0.413	0.310	0.207	0.510	0.340	0.255	0.170	0.463	0.309	0.231	0.154	0.439	0.293	0.220	0.146	0.408	0.272	0.204	0.136
WRB2	0.560	0.374	0.281	0.187	0.461	0.308	0.230	0.154	0.419	0.280	0.210	0.140	0.398	0.265	0.199	0.133	0.369	0.246	0.185	0.124
WRC	0.400	0.267	0.200	0.133	0.337	0.225	0.169	0.112	0.306	0.204	0.153	0.102	0.252	0.168	0.126	0.084	0.231	0.154	0.116	0.077

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.879	1.252	0.939	0.626	1.879	1.252	0.939	0.626	1.777	1.184	0.888	0.592	1.709	1.139	0.854	0.570	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.232	0.821	0.616	0.411
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.109	0.741	0.557	0.371
WRC	1.216	0.811	0.608	0.405	1.216	0.811	0.608	0.405	1.153	0.769	0.577	0.384	0.938	0.626	0.469	0.313	0.823	0.549	0.411	0.274

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.811	1.207	0.905	0.603	1.743	1.162	0.871	0.581	1.666	1.111	0.833	0.555	1.615	1.077	0.808	0.538	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.263	0.842	0.632	0.421	1.224	0.816	0.612	0.408	1.185	0.790	0.592	0.395
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.141	0.760	0.571	0.382	1.102	0.737	0.554	0.369	1.067	0.713	0.536	0.358
WRC	1.177	0.785	0.588	0.392	1.138	0.781	0.586	0.390	1.012	0.695	0.521	0.347	0.809	0.539	0.405	0.270	0.728	0.485	0.364	0.243

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.751	1.167	0.875	0.584	1.624	1.082	0.812	0.541	1.564	1.043	0.782	0.521	1.539	1.026	0.769	0.513	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.232	0.821	0.616	0.411	1.193	0.795	0.596	0.398	1.169	0.779	0.585	0.390	1.138	0.781	0.586	0.390
WRB2	1.280	0.797	0.599	0.400	1.109	0.741	0.557	0.371	1.075	0.719	0.539	0.360	1.055	0.704	0.529	0.353	1.027	0.706	0.530	0.354
WRC	1.138	0.758	0.586	0.390	0.949	0.652	0.489	0.326	0.855	0.587	0.440	0.293	0.700	0.467	0.350	0.233	0.653	0.435	0.326	0.218

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.556	1.037	0.778	0.519	1.556	1.037	0.778	0.519	1.479	0.986	0.740	0.493	1.420	0.946	0.710	0.473	1.255	0.837	0.628	0.418
WRB1	1.185	0.790	0.592	0.395	1.185	0.790	0.592	0.395	1.130	0.753	0.565	0.377	1.004	0.670	0.502	0.335	0.887	0.591	0.443	0.296
WRB2	1.067	0.713	0.536	0.357	1.067	0.713	0.536	0.357	1.019	0.680	0.511	0.341	0.906	0.605	0.454	0.303	0.800	0.534	0.401	0.268
WRC	0.840	0.560	0.420	0.280	0.840	0.560	0.420	0.280	0.730	0.486	0.365	0.243	0.564	0.376	0.282	0.188	0.496	0.331	0.248	0.165

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.505	1.003	0.752	0.502	1.454	0.969	0.727	0.485	1.386	0.924	0.693	0.462	1.352	0.901	0.676	0.451	1.200	0.800	0.600	0.400
WRB1	1.146	0.764	0.573	0.382	1.067	0.711	0.534	0.356	0.942	0.628	0.471	0.314	0.863	0.575	0.432	0.288	0.785	0.523	0.392	0.262
WRB2	1.033	0.690	0.518	0.345	0.963	0.643	0.483	0.322	0.850	0.568	0.427	0.284	0.779	0.520	0.390	0.260	0.709	0.473	0.355	0.238
WRC	0.761	0.507	0.381	0.254	0.690	0.460	0.345	0.230	0.612	0.408	0.306	0.204	0.490	0.326	0.245	0.163	0.442	0.295	0.221	0.147

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.454	0.969	0.727	0.485	1.360	0.907	0.680	0.453	1.309	0.873	0.655	0.436	1.284	0.856	0.661	0.440	1.153	0.769	0.577	0.384
WRB1	1.075	0.717	0.537	0.358	0.887	0.591	0.443	0.296	0.800	0.534	0.400	0.267	0.753	0.502	0.377	0.251	0.698	0.466	0.349	0.233
WRB2	0.969	0.647	0.486	0.324	0.800	0.534	0.401	0.268	0.723	0.483	0.362	0.242	0.681	0.454	0.341	0.228	0.631	0.422	0.317	0.211
WRC	0.698	0.466	0.349	0.233	0.573	0.382	0.286	0.191	0.518	0.345	0.259	0.173	0.422	0.281	0.211	0.141	0.394	0.263	0.197	0.131

PV-ezRack Commercial Tilt interface spacing table for

FIELDERS KINGKLIP 700

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.394	0.929	0.697	0.465	1.394	0.929	0.697	0.465	1.326	0.884	0.663	0.442	1.275	0.850	0.638	0.425	1.122	0.748	0.561	0.374
WRB1	0.949	0.633	0.475	0.316	0.949	0.633	0.475	0.316	0.824	0.549	0.412	0.275	0.738	0.492	0.369	0.246	0.643	0.429	0.322	0.214
WRB2	0.855	0.572	0.429	0.286	0.855	0.572	0.429	0.286	0.743	0.496	0.372	0.248	0.666	0.444	0.334	0.222	0.581	0.388	0.291	0.194
WRC	0.612	0.408	0.306	0.204	0.612	0.408	0.306	0.204	0.534	0.356	0.267	0.178	0.415	0.277	0.207	0.138	0.367	0.245	0.184	0.122

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.352	0.901	0.676	0.451	1.301	0.867	0.650	0.434	1.250	0.833	0.625	0.417	1.190	0.793	0.595	0.397	0.996	0.664	0.498	0.332
WRB1	0.863	0.575	0.432	0.288	0.777	0.518	0.388	0.259	0.690	0.460	0.345	0.230	0.636	0.424	0.318	0.212	0.573	0.382	0.286	0.191
WRB2	0.779	0.520	0.390	0.260	0.701	0.468	0.352	0.234	0.623	0.417	0.313	0.209	0.574	0.383	0.287	0.192	0.517	0.345	0.259	0.173
WRC	0.557	0.371	0.279	0.186	0.502	0.335	0.251	0.167	0.447	0.298	0.224	0.149	0.360	0.240	0.180	0.120	0.326	0.218	0.163	0.109

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.309	0.873	0.655	0.436	1.216	0.810	0.608	0.405	1.097	0.731	0.548	0.366	1.037	0.691	0.519	0.346	0.887	0.591	0.443	0.296
WRB1	0.785	0.523	0.392	0.262	0.643	0.429	0.322	0.214	0.588	0.392	0.294	0.196	0.549	0.366	0.275	0.183	0.510	0.340	0.255	0.170
WRB2	0.708	0.473	0.355	0.237	0.581	0.388	0.291	0.194	0.532	0.355	0.266	0.178	0.496	0.331	0.249	0.166	0.461	0.308	0.231	0.154
WRC	0.510	0.340	0.255	0.170	0.424	0.282	0.212	0.141	0.384	0.256	0.192	0.128	0.313	0.209	0.156	0.104	0.292	0.195	0.146	0.097

PV-ezRack Commercial Tilt interface spacing table for

FIELDERS KINGKLIP 700

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.250	0.833	0.625	0.417	1.250	0.833	0.625	0.417	1.139	0.759	0.570	0.380	1.012	0.674	0.506	0.337	0.824	0.549	0.412	0.275
WRB1	0.698	0.466	0.349	0.233	0.698	0.466	0.349	0.233	0.604	0.403	0.302	0.201	0.541	0.361	0.271	0.180	0.479	0.319	0.239	0.160
WRB2	0.631	0.421	0.316	0.211	0.631	0.421	0.316	0.211	0.546	0.364	0.274	0.182	0.489	0.327	0.245	0.164	0.433	0.289	0.216	0.144
WRC	0.455	0.303	0.228	0.152	0.455	0.303	0.228	0.152	0.400	0.267	0.200	0.133	0.306	0.204	0.153	0.102	0.272	0.181	0.136	0.091

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.190	0.793	0.595	0.397	1.071	0.714	0.536	0.357	0.952	0.635	0.476	0.317	0.875	0.584	0.438	0.292	0.730	0.486	0.365	0.243
WRB1	0.636	0.424	0.318	0.212	0.573	0.382	0.286	0.191	0.510	0.340	0.255	0.170	0.471	0.314	0.235	0.157	0.424	0.282	0.212	0.141
WRB2	0.574	0.383	0.287	0.192	0.517	0.345	0.259	0.173	0.461	0.308	0.231	0.154	0.425	0.284	0.213	0.142	0.383	0.255	0.192	0.128
WRC	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.337	0.225	0.169	0.112	0.265	0.177	0.133	0.088	0.245	0.163	0.122	0.082

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.088	0.725	0.544	0.363	0.892	0.595	0.446	0.298	0.808	0.538	0.404	0.269	0.765	0.510	0.383	0.255	0.651	0.434	0.326	0.217
WRB1	0.581	0.387	0.290	0.194	0.479	0.319	0.239	0.160	0.432	0.288	0.216	0.144	0.408	0.272	0.204	0.136	0.384	0.256	0.192	0.128
WRB2	0.524	0.350	0.263	0.175	0.433	0.289	0.216	0.144	0.390	0.261	0.196	0.130	0.369	0.246	0.185	0.123	0.348	0.232	0.174	0.116
WRC	0.377	0.251	0.188	0.126	0.314	0.209	0.157	0.105	0.282	0.188	0.141	0.094	0.231	0.154	0.116	0.077	0.218	0.145	0.109	0.073

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.833	1.222	0.916	0.611	1.833	1.222	0.916	0.611	1.659	1.106	0.829	0.553	1.460	0.973	0.730	0.487	1.200	0.800	0.600	0.400
WRB1	1.004	0.670	0.502	0.335	1.004	0.670	0.502	0.335	0.863	0.575	0.432	0.288	0.761	0.507	0.381	0.254	0.667	0.445	0.333	0.222
WRB2	0.969	0.603	0.453	0.303	0.969	0.603	0.453	0.303	0.833	0.519	0.390	0.260	0.719	0.458	0.344	0.230	0.601	0.401	0.301	0.201
WRC	0.636	0.424	0.318	0.212	0.636	0.424	0.318	0.212	0.549	0.366	0.275	0.183	0.422	0.281	0.211	0.141	0.374	0.249	0.187	0.125

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.750	1.167	0.875	0.583	1.559	1.039	0.780	0.520	1.360	0.907	0.680	0.453	1.244	0.829	0.622	0.415	1.051	0.701	0.526	0.350
WRB1	0.902	0.602	0.451	0.301	0.808	0.539	0.404	0.269	0.714	0.476	0.357	0.238	0.659	0.439	0.330	0.220	0.588	0.392	0.294	0.196
WRB2	0.871	0.543	0.407	0.272	0.780	0.486	0.365	0.244	0.645	0.429	0.323	0.216	0.593	0.397	0.298	0.199	0.530	0.354	0.266	0.178
WRC	0.573	0.382	0.286	0.191	0.518	0.345	0.259	0.173	0.455	0.303	0.228	0.152	0.367	0.245	0.184	0.122	0.333	0.222	0.167	0.111

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.576	1.050	0.788	0.525	1.269	0.846	0.634	0.423	1.136	0.757	0.568	0.379	1.070	0.713	0.535	0.357	0.934	0.622	0.467	0.311
WRB1	0.824	0.549	0.412	0.275	0.667	0.445	0.333	0.222	0.604	0.403	0.302	0.201	0.565	0.377	0.282	0.188	0.526	0.350	0.263	0.175
WRB2	0.795	0.495	0.372	0.248	0.601	0.401	0.301	0.201	0.545	0.364	0.273	0.182	0.510	0.340	0.255	0.171	0.474	0.317	0.238	0.159
WRC	0.526	0.350	0.263	0.175	0.432	0.288	0.216	0.144	0.392	0.262	0.196	0.131	0.320	0.213	0.160	0.107	0.292	0.195	0.146	0.097

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.111	0.741	0.556	0.370	1.111	0.741	0.556	0.370	0.954	0.636	0.477	0.318	0.846	0.564	0.423	0.282	0.698	0.466	0.349	0.233
WRB1	0.588	0.392	0.294	0.196	0.588	0.392	0.294	0.196	0.510	0.340	0.255	0.170	0.455	0.303	0.228	0.152	0.400	0.267	0.200	0.133
WRB2	0.530	0.354	0.266	0.178	0.530	0.354	0.266	0.178	0.460	0.307	0.231	0.154	0.411	0.274	0.206	0.137	0.361	0.241	0.181	0.121
WRC	0.384	0.256	0.192	0.128	0.384	0.256	0.192	0.128	0.330	0.220	0.165	0.110	0.258	0.172	0.129	0.086	0.224	0.150	0.112	0.075

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.003	0.669	0.502	0.334	0.896	0.597	0.448	0.299	0.788	0.525	0.394	0.263	0.721	0.481	0.361	0.240	0.620	0.413	0.310	0.207
WRB1	0.534	0.356	0.267	0.178	0.479	0.319	0.239	0.160	0.424	0.282	0.212	0.141	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118
WRB2	0.481	0.321	0.241	0.161	0.432	0.288	0.217	0.144	0.382	0.256	0.192	0.128	0.354	0.237	0.177	0.118	0.319	0.213	0.160	0.107
WRC	0.345	0.230	0.173	0.115	0.314	0.209	0.157	0.105	0.275	0.183	0.137	0.092	0.224	0.150	0.112	0.075	0.204	0.136	0.102	0.068

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.912	0.608	0.456	0.304	0.738	0.492	0.369	0.246	0.663	0.442	0.332	0.221	0.630	0.420	0.315	0.210	0.549	0.366	0.275	0.183
WRB1	0.486	0.324	0.243	0.162	0.400	0.267	0.200	0.133	0.361	0.241	0.180	0.120	0.345	0.230	0.173	0.115	0.314	0.209	0.157	0.105
WRB2	0.439	0.293	0.220	0.147	0.361	0.241	0.181	0.121	0.326	0.218	0.163	0.109	0.312	0.208	0.156	0.105	0.284	0.190	0.142	0.095
WRC	0.314	0.209	0.157	0.105	0.259	0.173	0.129	0.086	0.235	0.157	0.118	0.078	0.190	0.127	0.095	0.063	0.177	0.118	0.088	0.059

STRATCO TOPDECK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.796	0.531	0.398	0.265	0.796	0.531	0.398	0.265	0.688	0.459	0.344	0.229	0.614	0.409	0.307	0.205	0.510	0.340	0.255	0.170
WRB1	0.432	0.288	0.216	0.144	0.432	0.288	0.216	0.144	0.369	0.246	0.184	0.123	0.330	0.220	0.165	0.110	0.290	0.194	0.145	0.097
WRB2	0.389	0.260	0.195	0.130	0.389	0.260	0.195	0.130	0.333	0.222	0.167	0.111	0.297	0.198	0.149	0.099	0.262	0.175	0.131	0.088
WRC	0.282	0.188	0.141	0.094	0.282	0.188	0.141	0.094	0.243	0.162	0.122	0.081	0.190	0.127	0.095	0.063	0.163	0.109	0.082	0.054

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.721	0.481	0.361	0.240	0.647	0.431	0.323	0.216	0.572	0.381	0.286	0.191	0.522	0.348	0.261	0.174	0.447	0.298	0.224	0.149
WRB1	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.290	0.194	0.145	0.097	0.259	0.173	0.129	0.086
WRB2	0.354	0.236	0.177	0.118	0.319	0.213	0.160	0.106	0.283	0.189	0.142	0.095	0.262	0.175	0.131	0.088	0.234	0.156	0.117	0.078
WRC	0.251	0.167	0.126	0.084	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.163	0.109	0.082	0.054	0.150	0.100	0.075	0.050

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.655	0.437	0.328	0.218	0.539	0.359	0.270	0.180	0.481	0.321	0.240	0.160	0.456	0.304	0.228	0.152	0.400	0.267	0.200	0.133
WRB1	0.353	0.235	0.177	0.118	0.290	0.194	0.145	0.097	0.267	0.178	0.133	0.089	0.251	0.167	0.126	0.084	0.235	0.157	0.118	0.078
WRB2	0.318	0.213	0.160	0.107	0.262	0.175	0.131	0.088	0.241	0.161	0.121	0.081	0.227	0.151	0.114	0.076	0.213	0.142	0.107	0.071
WRC	0.235	0.157	0.118	0.078	0.188	0.126	0.094	0.063	0.173	0.115	0.086	0.058	0.143	0.095	0.071	0.048	0.136	0.091	0.068	0.045

STRATCO TOPDECK 700 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.580	0.387	0.290	0.193	0.580	0.387	0.290	0.193	0.506	0.337	0.253	0.169	0.448	0.299	0.224	0.149	0.377	0.251	0.188	0.126
WRB1	0.322	0.214	0.161	0.107	0.322	0.214	0.161	0.107	0.275	0.183	0.137	0.092	0.251	0.167	0.126	0.084	0.220	0.146	0.110	0.073
WRB2	0.290	0.194	0.145	0.097	0.290	0.194	0.145	0.097	0.248	0.166	0.124	0.083	0.227	0.151	0.113	0.076	0.199	0.133	0.099	0.066
WRC	0.212	0.141	0.106	0.071	0.212	0.141	0.106	0.071	0.180	0.120	0.090	0.060	0.143	0.095	0.071	0.048	0.122	0.082	0.061	0.041

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.522	0.348	0.261	0.174	0.473	0.315	0.236	0.158	0.423	0.282	0.211	0.141	0.390	0.260	0.195	0.130	0.330	0.220	0.165	0.110
WRB1	0.290	0.194	0.145	0.097	0.259	0.173	0.129	0.086	0.235	0.157	0.118	0.078	0.212	0.141	0.106	0.071	0.196	0.131	0.098	0.065
WRB2	0.262	0.175	0.131	0.088	0.234	0.156	0.117	0.078	0.213	0.142	0.106	0.071	0.191	0.128	0.096	0.064	0.177	0.118	0.089	0.059
WRC	0.188	0.126	0.094	0.063	0.173	0.115	0.086	0.058	0.149	0.099	0.075	0.050	0.122	0.082	0.061	0.041	0.109	0.073	0.054	0.036

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.481	0.321	0.240	0.160	0.398	0.265	0.199	0.133	0.357	0.238	0.178	0.119	0.340	0.227	0.170	0.113	0.298	0.199	0.149	0.099
WRB1	0.267	0.178	0.133	0.089	0.220	0.146	0.110	0.073	0.196	0.131	0.098	0.065	0.188	0.126	0.094	0.063	0.173	0.115	0.086	0.058
WRB2	0.241	0.161	0.121	0.080	0.199	0.133	0.099	0.066	0.177	0.118	0.089	0.059	0.170	0.114	0.085	0.057	0.156	0.104	0.078	0.052
WRC	0.173	0.115	0.086	0.058	0.141	0.094	0.071	0.047	0.133	0.089	0.067	0.044	0.109	0.073	0.054	0.036	0.102	0.068	0.051	0.034

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.879	1.252	0.939	0.626	1.879	1.252	0.939	0.626	1.649	1.099	0.825	0.550	1.454	0.969	0.727	0.485	1.161	0.774	0.581	0.387
WRB1	0.973	0.649	0.486	0.324	0.973	0.649	0.486	0.324	0.832	0.554	0.416	0.277	0.738	0.492	0.369	0.246	0.651	0.434	0.326	0.217
WRB2	0.939	0.584	0.439	0.293	0.939	0.584	0.439	0.293	0.802	0.500	0.376	0.251	0.697	0.444	0.333	0.223	0.586	0.392	0.294	0.196
WRC	0.620	0.413	0.310	0.207	0.620	0.413	0.310	0.207	0.534	0.356	0.267	0.178	0.408	0.272	0.204	0.136	0.360	0.240	0.180	0.120

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.734	1.156	0.867	0.578	1.547	1.031	0.774	0.516	1.352	0.901	0.676	0.451	1.233	0.822	0.616	0.411	1.020	0.680	0.510	0.340
WRB1	0.879	0.586	0.439	0.293	0.785	0.523	0.392	0.262	0.690	0.460	0.345	0.230	0.636	0.424	0.318	0.212	0.573	0.382	0.286	0.191
WRB2	0.848	0.528	0.397	0.265	0.757	0.472	0.355	0.237	0.624	0.415	0.312	0.209	0.572	0.382	0.287	0.192	0.516	0.345	0.259	0.173
WRC	0.557	0.371	0.279	0.186	0.502	0.335	0.251	0.167	0.447	0.298	0.224	0.149	0.354	0.236	0.177	0.118	0.320	0.213	0.160	0.107

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.564	1.043	0.782	0.521	1.258	0.839	0.629	0.419	1.131	0.754	0.565	0.377	1.063	0.708	0.531	0.354	0.902	0.602	0.451	0.301
WRB1	0.792	0.528	0.396	0.264	0.651	0.434	0.326	0.217	0.581	0.387	0.290	0.194	0.549	0.366	0.275	0.183	0.510	0.340	0.255	0.170
WRB2	0.765	0.476	0.358	0.239	0.586	0.392	0.294	0.196	0.523	0.350	0.262	0.175	0.495	0.331	0.248	0.166	0.460	0.307	0.231	0.154
WRC	0.510	0.340	0.255	0.170	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.306	0.204	0.153	0.102	0.286	0.190	0.143	0.095

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.105	0.737	0.553	0.368	1.105	0.737	0.553	0.368	0.943	0.629	0.472	0.315	0.842	0.561	0.421	0.281	0.675	0.450	0.337	0.225
WRB1	0.573	0.382	0.286	0.191	0.573	0.382	0.286	0.191	0.494	0.330	0.247	0.165	0.439	0.293	0.220	0.146	0.384	0.256	0.192	0.128
WRB2	0.516	0.345	0.259	0.173	0.516	0.345	0.259	0.173	0.446	0.298	0.223	0.149	0.397	0.265	0.199	0.132	0.347	0.232	0.174	0.116
WRC	0.369	0.246	0.184	0.123	0.369	0.246	0.184	0.123	0.322	0.214	0.161	0.107	0.245	0.163	0.122	0.082	0.218	0.145	0.109	0.073

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.994	0.663	0.497	0.332	0.892	0.595	0.446	0.298	0.782	0.521	0.391	0.261	0.723	0.482	0.361	0.241	0.596	0.398	0.298	0.199
WRB1	0.518	0.345	0.259	0.173	0.463	0.309	0.231	0.154	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.345	0.230	0.173	0.115
WRB2	0.467	0.312	0.234	0.156	0.418	0.279	0.210	0.140	0.375	0.251	0.188	0.126	0.340	0.227	0.170	0.114	0.312	0.208	0.156	0.105
WRC	0.337	0.225	0.169	0.112	0.306	0.204	0.153	0.102	0.267	0.178	0.133	0.089	0.211	0.141	0.105	0.070	0.197	0.131	0.099	0.066

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.901	0.601	0.451	0.300	0.731	0.487	0.366	0.244	0.663	0.442	0.332	0.221	0.621	0.414	0.310	0.207	0.534	0.356	0.267	0.178
WRB1	0.471	0.314	0.235	0.157	0.384	0.256	0.192	0.128	0.353	0.235	0.177	0.118	0.330	0.220	0.165	0.110	0.306	0.204	0.153	0.102
WRB2	0.425	0.284	0.213	0.142	0.347	0.232	0.174	0.116	0.319	0.213	0.160	0.107	0.298	0.199	0.149	0.100	0.277	0.185	0.139	0.092
WRC	0.306	0.204	0.153	0.102	0.251	0.167	0.126	0.084	0.228	0.152	0.114	0.076	0.190	0.127	0.095	0.063	0.177	0.118	0.088	0.059

STRATCO TOPDECK 700 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.791	0.527	0.395	0.264	0.791	0.527	0.395	0.264	0.680	0.453	0.340	0.227	0.604	0.402	0.302	0.201	0.494	0.330	0.247	0.165
WRB1	0.416	0.277	0.208	0.139	0.416	0.277	0.208	0.139	0.361	0.241	0.180	0.120	0.322	0.214	0.161	0.107	0.282	0.188	0.141	0.094
WRB2	0.375	0.250	0.188	0.125	0.375	0.250	0.188	0.125	0.325	0.217	0.163	0.109	0.290	0.194	0.146	0.097	0.255	0.170	0.128	0.085
WRC	0.275	0.183	0.137	0.092	0.275	0.183	0.137	0.092	0.235	0.157	0.118	0.078	0.184	0.122	0.092	0.061	0.163	0.109	0.082	0.054

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.714	0.476	0.357	0.238	0.646	0.431	0.323	0.215	0.570	0.380	0.285	0.190	0.519	0.346	0.259	0.173	0.439	0.293	0.220	0.146
WRB1	0.377	0.251	0.188	0.126	0.337	0.225	0.169	0.112	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.251	0.167	0.126	0.084
WRB2	0.340	0.227	0.170	0.114	0.304	0.203	0.153	0.102	0.276	0.185	0.139	0.092	0.248	0.166	0.124	0.083	0.227	0.151	0.114	0.076
WRC	0.243	0.162	0.122	0.081	0.220	0.146	0.110	0.073	0.196	0.131	0.098	0.065	0.156	0.104	0.078	0.052	0.143	0.095	0.071	0.048

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.655	0.436	0.327	0.218	0.536	0.357	0.268	0.179	0.485	0.323	0.242	0.162	0.451	0.300	0.225	0.150	0.392	0.262	0.196	0.131
WRB1	0.345	0.230	0.173	0.115	0.282	0.188	0.141	0.094	0.259	0.173	0.129	0.086	0.243	0.162	0.122	0.081	0.228	0.152	0.114	0.076
WRB2	0.311	0.208	0.156	0.104	0.255	0.170	0.128	0.085	0.234	0.156	0.117	0.078	0.220	0.147	0.110	0.074	0.206	0.137	0.103	0.069
WRC	0.228	0.152	0.114	0.076	0.188	0.126	0.094	0.063	0.165	0.110	0.082	0.055	0.136	0.091	0.068	0.045	0.129	0.086	0.065	0.043

STRATCO TOPDECK 700 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.578	0.385	0.289	0.193	0.578	0.385	0.289	0.193	0.502	0.334	0.251	0.167	0.442	0.295	0.221	0.147	0.361	0.241	0.180	0.120
WRB1	0.306	0.204	0.153	0.102	0.306	0.204	0.153	0.102	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.212	0.141	0.106	0.071
WRB2	0.276	0.184	0.138	0.092	0.276	0.184	0.138	0.092	0.241	0.161	0.121	0.081	0.220	0.147	0.110	0.074	0.192	0.128	0.096	0.064
WRC	0.204	0.136	0.102	0.068	0.204	0.136	0.102	0.068	0.173	0.115	0.086	0.058	0.136	0.091	0.068	0.045	0.122	0.082	0.061	0.041

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.519	0.346	0.259	0.173	0.468	0.312	0.234	0.156	0.417	0.278	0.208	0.139	0.383	0.255	0.191	0.128	0.322	0.214	0.161	0.107
WRB1	0.282	0.188	0.141	0.094	0.251	0.167	0.126	0.084	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.188	0.126	0.094	0.063
WRB2	0.255	0.170	0.128	0.085	0.227	0.151	0.114	0.076	0.206	0.137	0.103	0.069	0.184	0.123	0.092	0.062	0.170	0.113	0.085	0.057
WRC	0.180	0.120	0.090	0.060	0.165	0.110	0.082	0.055	0.149	0.099	0.075	0.050	0.116	0.077	0.058	0.039	0.109	0.073	0.054	0.036

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.476	0.317	0.238	0.159	0.391	0.261	0.196	0.130	0.357	0.238	0.179	0.119	0.332	0.221	0.166	0.111	0.290	0.194	0.145	0.097
WRB1	0.259	0.173	0.129	0.086	0.212	0.141	0.106	0.071	0.188	0.126	0.094	0.063	0.180	0.120	0.090	0.060	0.165	0.110	0.082	0.055
WRB2	0.234	0.156	0.117	0.078	0.192	0.128	0.096	0.064	0.170	0.114	0.085	0.057	0.163	0.109	0.082	0.054	0.149	0.099	0.075	0.050
WRC	0.165	0.110	0.082	0.055	0.141	0.094	0.071	0.047	0.126	0.084	0.063	0.042	0.102	0.068	0.051	0.034	0.095	0.063	0.048	0.032

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-29/AU and ER-I-34 (refer to Note 4)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.818	1.212	0.909	0.606	1.818	1.212	0.909	0.606	1.719	1.146	0.860	0.573	1.653	1.102	0.827	0.551	1.349	0.899	0.674	0.450
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.193	0.795	0.596	0.398	0.939	0.626	0.470	0.313
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.127	0.718	0.539	0.360	0.846	0.565	0.425	0.283
WRC	0.989	0.659	0.494	0.330	0.989	0.659	0.494	0.330	0.855	0.570	0.428	0.285	0.660	0.440	0.330	0.220	0.520	0.347	0.260	0.173

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.752	1.168	0.876	0.584	1.686	1.124	0.843	0.562	1.612	1.075	0.806	0.537	1.563	1.042	0.781	0.521	1.292	0.862	0.646	0.431
WRB1	1.365	0.910	0.683	0.455	1.263	0.842	0.632	0.421	1.114	0.743	0.557	0.371	1.020	0.680	0.510	0.340	0.826	0.551	0.413	0.275
WRB2	1.317	0.821	0.616	0.411	1.219	0.760	0.571	0.381	1.007	0.670	0.503	0.337	0.918	0.614	0.461	0.307	0.744	0.497	0.374	0.249
WRC	0.894	0.596	0.447	0.298	0.808	0.539	0.404	0.269	0.714	0.476	0.357	0.238	0.571	0.381	0.286	0.190	0.465	0.310	0.233	0.155

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.695	1.130	0.847	0.565	1.571	1.047	0.786	0.524	1.514	1.009	0.757	0.505	1.489	0.993	0.744	0.496	1.243	0.829	0.621	0.414
WRB1	1.279	0.853	0.639	0.426	1.044	0.696	0.522	0.348	0.942	0.628	0.471	0.314	0.887	0.591	0.443	0.296	0.734	0.490	0.367	0.245
WRB2	1.235	0.769	0.577	0.386	0.940	0.628	0.472	0.315	0.849	0.567	0.426	0.284	0.800	0.534	0.401	0.268	0.663	0.443	0.332	0.222
WRC	0.816	0.544	0.408	0.272	0.667	0.445	0.333	0.222	0.604	0.403	0.302	0.201	0.496	0.331	0.248	0.165	0.410	0.273	0.205	0.137

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-29/AU and ER-I-34 (refer to Note 4)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.505	1.004	0.753	0.502	1.505	1.004	0.753	0.502	1.431	0.954	0.716	0.477	1.308	0.872	0.654	0.436	0.982	0.654	0.491	0.327
WRB1	0.918	0.612	0.459	0.306	0.918	0.612	0.459	0.306	0.792	0.528	0.396	0.264	0.706	0.471	0.353	0.235	0.558	0.372	0.279	0.186
WRB2	0.827	0.553	0.415	0.277	0.827	0.553	0.415	0.277	0.715	0.477	0.358	0.239	0.637	0.425	0.320	0.213	0.504	0.336	0.252	0.169
WRC	0.596	0.398	0.298	0.199	0.596	0.398	0.298	0.199	0.510	0.340	0.255	0.170	0.394	0.263	0.197	0.131	0.318	0.212	0.159	0.106

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.456	0.971	0.728	0.485	1.390	0.927	0.695	0.463	1.226	0.817	0.613	0.409	1.119	0.746	0.559	0.373	0.869	0.579	0.434	0.290
WRB1	0.832	0.554	0.416	0.277	0.753	0.502	0.377	0.251	0.667	0.445	0.333	0.222	0.612	0.408	0.306	0.204	0.494	0.330	0.247	0.165
WRB2	0.750	0.501	0.376	0.251	0.680	0.454	0.341	0.227	0.602	0.402	0.302	0.201	0.552	0.369	0.277	0.185	0.446	0.298	0.224	0.150
WRC	0.541	0.361	0.271	0.180	0.486	0.324	0.243	0.162	0.432	0.288	0.216	0.144	0.347	0.231	0.173	0.116	0.282	0.188	0.141	0.094

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.407	0.938	0.703	0.469	1.143	0.762	0.572	0.381	1.028	0.685	0.514	0.343	0.971	0.647	0.485	0.324	0.770	0.513	0.385	0.257
WRB1	0.761	0.507	0.381	0.254	0.620	0.413	0.310	0.207	0.565	0.377	0.282	0.188	0.534	0.356	0.267	0.178	0.445	0.297	0.222	0.148
WRB2	0.686	0.458	0.344	0.230	0.559	0.373	0.280	0.187	0.511	0.341	0.256	0.171	0.482	0.322	0.242	0.162	0.402	0.269	0.202	0.134
WRC	0.494	0.330	0.247	0.165	0.408	0.272	0.204	0.136	0.369	0.246	0.184	0.123	0.299	0.199	0.150	0.100	0.251	0.167	0.125	0.084

LYSAGHT LONGLINE 305 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-29/AU and ER-I-34 (refer to Note 4)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.234	0.823	0.617	0.411	1.234	0.823	0.617	0.411	1.061	0.707	0.531	0.354	0.946	0.631	0.473	0.315	0.713	0.475	0.357	0.238
WRB1	0.667	0.445	0.333	0.222	0.667	0.445	0.333	0.222	0.581	0.387	0.290	0.194	0.518	0.345	0.259	0.173	0.410	0.273	0.205	0.137
WRB2	0.601	0.402	0.302	0.201	0.601	0.402	0.302	0.201	0.524	0.350	0.263	0.175	0.467	0.312	0.234	0.156	0.370	0.247	0.185	0.124
WRC	0.432	0.288	0.216	0.144	0.432	0.288	0.216	0.144	0.377	0.251	0.188	0.126	0.292	0.195	0.146	0.097	0.233	0.155	0.116	0.078

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.119	0.746	0.559	0.373	1.004	0.669	0.502	0.335	0.888	0.592	0.444	0.296	0.814	0.543	0.407	0.271	0.628	0.419	0.314	0.209
WRB1	0.604	0.403	0.302	0.201	0.549	0.366	0.275	0.183	0.486	0.324	0.243	0.162	0.447	0.298	0.224	0.149	0.367	0.245	0.184	0.122
WRB2	0.545	0.364	0.273	0.182	0.496	0.331	0.249	0.166	0.439	0.294	0.220	0.147	0.404	0.270	0.202	0.135	0.332	0.221	0.166	0.111
WRC	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.252	0.168	0.126	0.084	0.208	0.139	0.104	0.069

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.012	0.675	0.506	0.337	0.831	0.554	0.415	0.277	0.749	0.499	0.374	0.250	0.707	0.472	0.354	0.236	0.565	0.377	0.282	0.188
WRB1	0.557	0.371	0.279	0.186	0.455	0.303	0.228	0.152	0.416	0.277	0.208	0.139	0.392	0.262	0.196	0.131	0.325	0.217	0.162	0.108
WRB2	0.502	0.336	0.252	0.168	0.411	0.274	0.206	0.137	0.376	0.251	0.188	0.126	0.355	0.237	0.178	0.119	0.294	0.196	0.147	0.098
WRC	0.361	0.241	0.180	0.120	0.298	0.199	0.149	0.099	0.267	0.178	0.133	0.089	0.218	0.145	0.109	0.073	0.184	0.122	0.092	0.061

LYSAGHT LONGLINE 305 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-29/AU and ER-I-34 (refer to Note 4)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.897	0.598	0.448	0.299	0.897	0.598	0.448	0.299	0.773	0.515	0.387	0.258	0.691	0.461	0.345	0.230	0.523	0.348	0.261	0.174
WRB1	0.494	0.330	0.247	0.165	0.494	0.330	0.247	0.165	0.432	0.288	0.216	0.144	0.384	0.256	0.192	0.128	0.304	0.202	0.152	0.101
WRB2	0.446	0.298	0.224	0.149	0.446	0.298	0.224	0.149	0.390	0.260	0.195	0.130	0.347	0.232	0.174	0.116	0.274	0.183	0.137	0.092
WRC	0.322	0.214	0.161	0.107	0.322	0.214	0.161	0.107	0.282	0.188	0.141	0.094	0.218	0.145	0.109	0.073	0.171	0.114	0.086	0.057

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.814	0.543	0.407	0.271	0.732	0.488	0.366	0.244	0.650	0.433	0.325	0.217	0.600	0.400	0.300	0.200	0.466	0.311	0.233	0.155
WRB1	0.447	0.298	0.224	0.149	0.408	0.272	0.204	0.136	0.361	0.241	0.180	0.120	0.330	0.220	0.165	0.110	0.268	0.179	0.134	0.089
WRB2	0.404	0.269	0.202	0.135	0.368	0.246	0.185	0.123	0.326	0.218	0.163	0.109	0.298	0.199	0.149	0.100	0.243	0.162	0.121	0.081
WRC	0.290	0.194	0.145	0.097	0.267	0.178	0.133	0.089	0.235	0.157	0.118	0.078	0.190	0.127	0.095	0.063	0.153	0.102	0.077	0.051

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.740	0.494	0.370	0.247	0.609	0.406	0.304	0.203	0.551	0.367	0.276	0.184	0.518	0.345	0.259	0.173	0.417	0.278	0.208	0.139
WRB1	0.408	0.272	0.204	0.136	0.337	0.225	0.169	0.112	0.306	0.204	0.153	0.102	0.290	0.194	0.145	0.097	0.240	0.160	0.120	0.080
WRB2	0.368	0.246	0.185	0.123	0.305	0.204	0.152	0.102	0.277	0.185	0.139	0.092	0.263	0.175	0.132	0.088	0.217	0.145	0.109	0.073
WRC	0.267	0.178	0.133	0.089	0.220	0.146	0.110	0.073	0.204	0.136	0.102	0.068	0.163	0.109	0.082	0.054	0.141	0.094	0.070	0.047

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.910	1.274	0.955	0.637	1.910	1.274	0.955	0.637	1.807	1.204	0.903	0.602	1.737	1.158	0.869	0.579	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.232	0.821	0.616	0.411
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.109	0.741	0.557	0.371
WRC	1.216	0.811	0.608	0.405	1.216	0.811	0.608	0.405	1.153	0.769	0.577	0.384	0.966	0.644	0.483	0.322	0.925	0.617	0.462	0.308

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.841	1.227	0.921	0.614	1.772	1.181	0.886	0.591	1.694	1.129	0.847	0.565	1.642	1.095	0.821	0.547	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.263	0.842	0.632	0.421	1.224	0.816	0.612	0.408	1.185	0.790	0.592	0.395
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.141	0.760	0.571	0.382	1.102	0.737	0.554	0.369	1.067	0.713	0.536	0.358
WRC	1.177	0.785	0.588	0.392	1.138	0.781	0.586	0.390	1.069	0.713	0.535	0.356	0.918	0.612	0.473	0.315	0.910	0.578	0.433	0.289

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.781	1.187	0.890	0.594	1.651	1.101	0.826	0.550	1.591	1.060	0.795	0.530	1.565	1.043	0.782	0.522	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.232	0.821	0.616	0.411	1.193	0.795	0.596	0.398	1.169	0.779	0.585	0.390	1.138	0.781	0.586	0.390
WRB2	1.280	0.797	0.599	0.400	1.109	0.741	0.557	0.371	1.075	0.719	0.539	0.360	1.055	0.704	0.529	0.353	1.027	0.706	0.530	0.354
WRC	1.138	0.758	0.586	0.390	1.046	0.697	0.523	0.349	0.989	0.649	0.483	0.320	0.847	0.564	0.423	0.282	0.787	0.524	0.393	0.262

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.582	1.055	0.791	0.527	1.582	1.055	0.791	0.527	1.504	1.003	0.752	0.501	1.444	0.962	0.722	0.481	1.255	0.837	0.628	0.418
WRB1	1.185	0.790	0.592	0.395	1.185	0.790	0.592	0.395	1.130	0.753	0.565	0.377	1.115	0.743	0.557	0.372	1.023	0.682	0.512	0.341
WRB2	1.067	0.713	0.536	0.357	1.067	0.713	0.536	0.357	1.019	0.680	0.511	0.341	1.006	0.671	0.504	0.336	0.923	0.616	0.463	0.309
WRC	1.000	0.667	0.500	0.333	1.000	0.667	0.500	0.333	0.877	0.585	0.438	0.292	0.694	0.462	0.347	0.231	0.612	0.408	0.306	0.204

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.530	1.020	0.765	0.510	1.478	0.985	0.739	0.493	1.409	0.939	0.704	0.470	1.374	0.916	0.687	0.458	1.200	0.800	0.600	0.400
WRB1	1.146	0.764	0.573	0.382	1.106	0.738	0.569	0.380	1.090	0.692	0.519	0.346	1.015	0.677	0.508	0.338	0.946	0.627	0.467	0.309
WRB2	1.033	0.690	0.518	0.345	0.998	0.667	0.515	0.343	0.984	0.627	0.471	0.314	0.916	0.612	0.459	0.306	0.855	0.567	0.423	0.280
WRC	0.923	0.615	0.462	0.308	0.831	0.554	0.415	0.277	0.738	0.492	0.369	0.246	0.598	0.399	0.299	0.199	0.544	0.363	0.272	0.181

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.478	0.985	0.739	0.493	1.383	0.922	0.692	0.461	1.331	0.887	0.666	0.444	1.305	0.896	0.672	0.448	1.153	0.769	0.577	0.384
WRB1	1.114	0.743	0.557	0.382	1.023	0.682	0.512	0.341	0.962	0.639	0.476	0.315	0.908	0.604	0.449	0.297	0.846	0.560	0.417	0.276
WRB2	1.005	0.671	0.504	0.346	0.923	0.616	0.463	0.309	0.869	0.579	0.431	0.286	0.820	0.546	0.407	0.270	0.765	0.507	0.378	0.250
WRC	0.838	0.559	0.419	0.279	0.692	0.462	0.346	0.231	0.623	0.415	0.312	0.208	0.524	0.349	0.262	0.175	0.483	0.322	0.241	0.161

METROLL METLOK 700 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.418	0.945	0.709	0.473	1.418	0.945	0.709	0.473	1.348	0.899	0.674	0.449	1.297	0.864	0.648	0.432	1.130	0.753	0.565	0.377
WRB1	1.067	0.711	0.534	0.356	1.067	0.711	0.534	0.356	1.012	0.675	0.506	0.337	0.902	0.602	0.451	0.301	0.792	0.528	0.396	0.264
WRB2	0.961	0.643	0.483	0.322	0.961	0.643	0.483	0.322	0.913	0.609	0.458	0.305	0.814	0.543	0.408	0.272	0.715	0.477	0.358	0.239
WRC	0.761	0.507	0.381	0.254	0.761	0.507	0.381	0.254	0.659	0.439	0.330	0.220	0.510	0.340	0.255	0.170	0.449	0.299	0.224	0.150

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.374	0.916	0.687	0.458	1.323	0.882	0.661	0.441	1.271	0.847	0.635	0.424	1.236	0.824	0.618	0.412	1.083	0.722	0.541	0.361
WRB1	1.028	0.685	0.514	0.343	0.957	0.638	0.479	0.319	0.847	0.565	0.424	0.282	0.777	0.518	0.388	0.259	0.706	0.471	0.353	0.235
WRB2	0.927	0.619	0.465	0.310	0.864	0.577	0.433	0.289	0.765	0.511	0.384	0.256	0.701	0.468	0.351	0.234	0.638	0.426	0.320	0.214
WRC	0.690	0.460	0.345	0.230	0.620	0.413	0.310	0.207	0.549	0.366	0.275	0.183	0.442	0.295	0.221	0.147	0.401	0.267	0.201	0.134

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.331	0.887	0.666	0.444	1.245	0.830	0.622	0.415	1.202	0.801	0.601	0.401	1.176	0.784	0.588	0.392	1.044	0.696	0.522	0.348
WRB1	0.965	0.643	0.483	0.322	0.792	0.528	0.396	0.264	0.722	0.481	0.361	0.241	0.683	0.455	0.341	0.228	0.628	0.418	0.314	0.209
WRB2	0.870	0.581	0.437	0.291	0.715	0.477	0.358	0.239	0.653	0.435	0.327	0.218	0.617	0.412	0.309	0.207	0.567	0.379	0.285	0.189
WRC	0.628	0.418	0.314	0.209	0.518	0.345	0.259	0.173	0.471	0.314	0.235	0.157	0.388	0.258	0.194	0.129	0.360	0.240	0.180	0.120

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.271	0.847	0.635	0.424	1.271	0.847	0.635	0.424	1.210	0.807	0.605	0.403	1.167	0.778	0.583	0.389	1.012	0.675	0.506	0.337
WRB1	0.863	0.575	0.432	0.288	0.863	0.575	0.432	0.288	0.745	0.497	0.373	0.248	0.667	0.445	0.333	0.222	0.588	0.392	0.294	0.196
WRB2	0.779	0.520	0.390	0.261	0.779	0.520	0.390	0.261	0.673	0.450	0.338	0.225	0.603	0.402	0.301	0.202	0.532	0.355	0.266	0.177
WRC	0.565	0.377	0.282	0.188	0.565	0.377	0.282	0.188	0.486	0.324	0.243	0.162	0.381	0.254	0.190	0.127	0.333	0.222	0.167	0.111

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.236	0.824	0.618	0.412	1.193	0.795	0.596	0.398	1.141	0.761	0.571	0.380	1.098	0.732	0.549	0.366	0.902	0.602	0.451	0.301
WRB1	0.785	0.523	0.392	0.262	0.706	0.471	0.353	0.235	0.628	0.418	0.314	0.209	0.581	0.387	0.290	0.194	0.526	0.350	0.263	0.175
WRB2	0.709	0.473	0.355	0.237	0.637	0.425	0.319	0.214	0.567	0.379	0.284	0.190	0.524	0.350	0.262	0.175	0.475	0.317	0.238	0.159
WRC	0.510	0.340	0.255	0.170	0.463	0.309	0.231	0.154	0.408	0.272	0.204	0.136	0.326	0.218	0.163	0.109	0.299	0.199	0.150	0.100

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.193	0.795	0.596	0.398	1.115	0.743	0.558	0.372	1.011	0.674	0.506	0.337	0.959	0.640	0.480	0.320	0.808	0.539	0.404	0.269
WRB1	0.714	0.476	0.357	0.238	0.588	0.392	0.294	0.196	0.534	0.356	0.267	0.178	0.502	0.335	0.251	0.167	0.471	0.314	0.235	0.157
WRB2	0.645	0.431	0.323	0.215	0.532	0.355	0.266	0.177	0.483	0.322	0.242	0.161	0.454	0.303	0.228	0.152	0.426	0.284	0.214	0.143
WRC	0.471	0.314	0.235	0.157	0.384	0.256	0.192	0.128	0.353	0.235	0.177	0.118	0.286	0.190	0.143	0.095	0.265	0.177	0.133	0.088

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.894	1.263	0.947	0.631	1.894	1.263	0.947	0.631	1.791	1.194	0.896	0.597	1.723	1.149	0.861	0.574	1.499	0.999	0.749	0.500
WRB1	1.350	0.900	0.675	0.450	1.350	0.900	0.675	0.450	1.161	0.774	0.581	0.387	1.028	0.685	0.514	0.343	0.902	0.602	0.451	0.301
WRB2	1.302	0.811	0.609	0.407	1.302	0.811	0.609	0.407	1.120	0.698	0.524	0.350	0.972	0.618	0.465	0.310	0.813	0.543	0.408	0.272
WRC	0.855	0.570	0.428	0.285	0.855	0.570	0.428	0.285	0.738	0.492	0.369	0.246	0.571	0.381	0.286	0.190	0.503	0.335	0.252	0.168

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.826	1.217	0.913	0.609	1.757	1.171	0.879	0.586	1.680	1.120	0.840	0.560	1.629	1.086	0.814	0.543	1.420	0.947	0.710	0.473
WRB1	1.216	0.811	0.608	0.405	1.091	0.727	0.545	0.364	0.965	0.643	0.483	0.322	0.879	0.586	0.439	0.293	0.792	0.528	0.396	0.264
WRB2	1.173	0.731	0.549	0.366	1.053	0.656	0.493	0.329	0.872	0.581	0.436	0.292	0.791	0.529	0.398	0.265	0.714	0.477	0.359	0.239
WRC	0.777	0.518	0.388	0.259	0.698	0.466	0.349	0.233	0.620	0.413	0.310	0.207	0.490	0.326	0.245	0.163	0.442	0.295	0.221	0.147

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.766	1.177	0.883	0.589	1.637	1.091	0.819	0.546	1.577	1.051	0.789	0.526	1.483	0.989	0.741	0.494	1.255	0.837	0.628	0.418
WRB1	1.106	0.738	0.553	0.369	0.902	0.602	0.451	0.301	0.816	0.544	0.408	0.272	0.761	0.507	0.381	0.254	0.706	0.471	0.353	0.235
WRB2	1.068	0.665	0.499	0.334	0.813	0.543	0.408	0.272	0.736	0.492	0.369	0.246	0.687	0.459	0.344	0.230	0.637	0.425	0.320	0.213
WRC	0.706	0.471	0.353	0.235	0.581	0.387	0.290	0.194	0.526	0.350	0.263	0.175	0.428	0.286	0.214	0.143	0.394	0.263	0.197	0.131

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.551	1.034	0.776	0.517	1.551	1.034	0.776	0.517	1.329	0.886	0.664	0.443	1.183	0.789	0.591	0.394	0.942	0.628	0.471	0.314
WRB1	0.792	0.528	0.396	0.264	0.792	0.528	0.396	0.264	0.690	0.460	0.345	0.230	0.612	0.408	0.306	0.204	0.541	0.361	0.271	0.180
WRB2	0.714	0.477	0.358	0.239	0.714	0.477	0.358	0.239	0.623	0.416	0.312	0.208	0.552	0.369	0.277	0.184	0.489	0.326	0.245	0.164
WRC	0.510	0.340	0.255	0.170	0.510	0.340	0.255	0.170	0.447	0.298	0.224	0.149	0.347	0.231	0.173	0.116	0.306	0.204	0.153	0.102

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.397	0.931	0.699	0.466	1.251	0.834	0.626	0.417	1.097	0.731	0.549	0.366	1.011	0.674	0.506	0.337	0.832	0.554	0.416	0.277
WRB1	0.722	0.481	0.361	0.241	0.651	0.434	0.326	0.217	0.573	0.382	0.286	0.191	0.526	0.350	0.263	0.175	0.479	0.319	0.239	0.160
WRB2	0.651	0.435	0.326	0.218	0.588	0.392	0.295	0.196	0.517	0.346	0.260	0.173	0.474	0.317	0.238	0.159	0.432	0.289	0.217	0.145
WRC	0.463	0.309	0.231	0.154	0.416	0.277	0.208	0.139	0.369	0.246	0.184	0.123	0.299	0.199	0.150	0.100	0.272	0.181	0.136	0.091

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.269	0.846	0.634	0.423	1.029	0.686	0.514	0.343	0.926	0.617	0.463	0.309	0.874	0.583	0.437	0.291	0.738	0.492	0.369	0.246
WRB1	0.659	0.439	0.330	0.220	0.541	0.361	0.271	0.180	0.486	0.324	0.243	0.162	0.463	0.309	0.231	0.154	0.424	0.282	0.212	0.141
WRB2	0.594	0.397	0.298	0.199	0.489	0.326	0.245	0.164	0.440	0.293	0.220	0.147	0.418	0.279	0.210	0.140	0.383	0.256	0.192	0.128
WRC	0.424	0.282	0.212	0.141	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.258	0.172	0.129	0.086	0.238	0.159	0.119	0.079

STRAMIT SPEED DECK 500 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.114	0.743	0.557	0.371	1.114	0.743	0.557	0.371	0.960	0.640	0.480	0.320	0.849	0.566	0.424	0.283	0.683	0.455	0.341	0.228
WRB1	0.581	0.387	0.290	0.194	0.581	0.387	0.290	0.194	0.502	0.335	0.251	0.167	0.447	0.298	0.224	0.149	0.392	0.262	0.196	0.131
WRB2	0.523	0.350	0.263	0.175	0.523	0.350	0.263	0.175	0.453	0.302	0.227	0.151	0.404	0.269	0.202	0.135	0.354	0.236	0.177	0.119
WRC	0.377	0.251	0.188	0.126	0.377	0.251	0.188	0.126	0.330	0.220	0.165	0.110	0.252	0.168	0.126	0.084	0.224	0.150	0.112	0.075

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.003	0.669	0.501	0.334	0.900	0.600	0.450	0.300	0.797	0.531	0.399	0.266	0.729	0.486	0.364	0.243	0.604	0.403	0.302	0.201
WRB1	0.526	0.350	0.263	0.175	0.471	0.314	0.235	0.157	0.416	0.277	0.208	0.139	0.384	0.256	0.192	0.128	0.353	0.235	0.177	0.118
WRB2	0.474	0.317	0.238	0.159	0.425	0.284	0.213	0.142	0.375	0.251	0.188	0.126	0.347	0.232	0.174	0.116	0.319	0.213	0.160	0.107
WRC	0.345	0.230	0.173	0.115	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.218	0.145	0.109	0.073	0.197	0.131	0.099	0.066

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.909	0.606	0.454	0.303	0.746	0.497	0.373	0.249	0.677	0.451	0.339	0.226	0.634	0.423	0.317	0.211	0.541	0.361	0.271	0.180
WRB1	0.479	0.319	0.239	0.160	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118	0.337	0.225	0.169	0.112	0.314	0.209	0.157	0.105
WRB2	0.432	0.288	0.216	0.144	0.354	0.236	0.177	0.119	0.319	0.213	0.160	0.107	0.305	0.203	0.153	0.102	0.284	0.190	0.142	0.095
WRC	0.314	0.209	0.157	0.105	0.259	0.173	0.129	0.086	0.235	0.157	0.118	0.078	0.190	0.127	0.095	0.063	0.177	0.118	0.088	0.059

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.806	0.537	0.403	0.269	0.806	0.537	0.403	0.269	0.703	0.469	0.351	0.234	0.626	0.417	0.313	0.209	0.502	0.335	0.251	0.167
WRB1	0.424	0.282	0.212	0.141	0.424	0.282	0.212	0.141	0.369	0.246	0.184	0.123	0.330	0.220	0.165	0.110	0.290	0.194	0.145	0.097
WRB2	0.383	0.255	0.192	0.128	0.383	0.255	0.192	0.128	0.333	0.222	0.167	0.111	0.298	0.199	0.149	0.100	0.262	0.175	0.131	0.088
WRC	0.282	0.188	0.141	0.094	0.282	0.188	0.141	0.094	0.243	0.162	0.122	0.081	0.190	0.127	0.095	0.063	0.170	0.113	0.085	0.057

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.729	0.486	0.364	0.243	0.660	0.440	0.330	0.220	0.583	0.389	0.291	0.194	0.540	0.360	0.270	0.180	0.447	0.298	0.224	0.149
WRB1	0.384	0.256	0.192	0.128	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.290	0.194	0.145	0.097	0.259	0.173	0.129	0.086
WRB2	0.347	0.232	0.174	0.116	0.319	0.213	0.160	0.107	0.284	0.189	0.142	0.095	0.262	0.175	0.131	0.088	0.234	0.156	0.117	0.078
WRC	0.251	0.167	0.126	0.084	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.163	0.109	0.082	0.054	0.150	0.100	0.075	0.050

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.669	0.446	0.334	0.223	0.549	0.366	0.274	0.183	0.497	0.331	0.249	0.166	0.471	0.314	0.236	0.157	0.400	0.267	0.200	0.133
WRB1	0.353	0.235	0.177	0.118	0.290	0.194	0.145	0.097	0.267	0.178	0.133	0.089	0.251	0.167	0.126	0.084	0.235	0.157	0.118	0.078
WRB2	0.319	0.213	0.160	0.107	0.262	0.175	0.131	0.088	0.241	0.161	0.121	0.081	0.227	0.151	0.114	0.076	0.213	0.142	0.107	0.071
WRC	0.235	0.157	0.118	0.078	0.196	0.131	0.098	0.065	0.173	0.115	0.086	0.058	0.143	0.095	0.071	0.048	0.136	0.091	0.068	0.045

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.943	1.296	0.972	0.648	1.943	1.296	0.972	0.648	1.838	1.225	0.919	0.613	1.767	1.178	0.884	0.589	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.216	0.811	0.608	0.405	1.083	0.722	0.541	0.361	0.942	0.628	0.471	0.314
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.173	0.731	0.549	0.367	1.024	0.652	0.489	0.327	0.848	0.567	0.426	0.284
WRC	0.894	0.596	0.447	0.298	0.894	0.596	0.447	0.298	0.777	0.518	0.388	0.259	0.598	0.399	0.299	0.199	0.524	0.349	0.262	0.175

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.873	1.249	0.936	0.624	1.803	1.202	0.901	0.601	1.723	1.149	0.862	0.574	1.671	1.114	0.835	0.557	1.436	0.957	0.718	0.479
WRB1	1.279	0.853	0.639	0.426	1.146	0.764	0.573	0.382	1.004	0.670	0.502	0.335	0.926	0.617	0.463	0.309	0.832	0.554	0.416	0.277
WRB2	1.234	0.769	0.577	0.385	1.106	0.689	0.518	0.346	0.907	0.604	0.454	0.303	0.834	0.557	0.419	0.279	0.749	0.501	0.376	0.251
WRC	0.816	0.544	0.408	0.272	0.730	0.486	0.365	0.243	0.643	0.429	0.322	0.214	0.517	0.345	0.258	0.172	0.462	0.308	0.231	0.154

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.811	1.208	0.906	0.604	1.679	1.120	0.840	0.560	1.618	1.079	0.809	0.539	1.592	1.061	0.796	0.531	1.318	0.879	0.659	0.439
WRB1	1.161	0.774	0.581	0.387	0.942	0.628	0.471	0.314	0.847	0.565	0.424	0.282	0.800	0.534	0.400	0.267	0.745	0.497	0.373	0.248
WRB2	1.121	0.698	0.524	0.350	0.848	0.567	0.426	0.284	0.764	0.511	0.383	0.256	0.722	0.482	0.362	0.242	0.673	0.449	0.337	0.225
WRC	0.738	0.492	0.369	0.246	0.604	0.403	0.302	0.201	0.549	0.366	0.275	0.183	0.449	0.299	0.224	0.150	0.415	0.277	0.207	0.138

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.609	1.073	0.805	0.536	1.609	1.073	0.805	0.536	1.424	0.950	0.712	0.475	1.266	0.844	0.633	0.422	0.989	0.659	0.494	0.330
WRB1	0.832	0.554	0.416	0.277	0.832	0.554	0.416	0.277	0.722	0.481	0.361	0.241	0.643	0.429	0.322	0.214	0.565	0.377	0.282	0.188
WRB2	0.749	0.501	0.376	0.251	0.749	0.501	0.376	0.251	0.651	0.435	0.326	0.218	0.581	0.387	0.291	0.194	0.510	0.340	0.255	0.171
WRC	0.534	0.356	0.267	0.178	0.534	0.356	0.267	0.178	0.463	0.309	0.231	0.154	0.360	0.240	0.180	0.120	0.320	0.213	0.160	0.107

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.504	1.002	0.752	0.501	1.345	0.897	0.673	0.448	1.187	0.791	0.594	0.396	1.082	0.721	0.541	0.361	0.871	0.581	0.435	0.290
WRB1	0.753	0.502	0.377	0.251	0.683	0.455	0.341	0.228	0.604	0.403	0.302	0.201	0.549	0.366	0.275	0.183	0.502	0.335	0.251	0.167
WRB2	0.679	0.454	0.340	0.227	0.616	0.411	0.309	0.206	0.545	0.365	0.274	0.183	0.496	0.331	0.248	0.166	0.454	0.303	0.227	0.152
WRC	0.486	0.324	0.243	0.162	0.439	0.293	0.220	0.146	0.392	0.262	0.196	0.131	0.313	0.209	0.156	0.104	0.279	0.186	0.139	0.093

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.363	0.909	0.681	0.454	1.108	0.739	0.554	0.369	0.994	0.662	0.497	0.331	0.941	0.627	0.470	0.314	0.777	0.518	0.388	0.259
WRB1	0.690	0.460	0.345	0.230	0.565	0.377	0.282	0.188	0.510	0.340	0.255	0.170	0.479	0.319	0.239	0.160	0.447	0.298	0.224	0.149
WRB2	0.623	0.416	0.312	0.208	0.510	0.340	0.255	0.171	0.461	0.308	0.231	0.154	0.433	0.289	0.217	0.145	0.404	0.270	0.203	0.135
WRC	0.447	0.298	0.224	0.149	0.369	0.246	0.184	0.123	0.330	0.220	0.165	0.110	0.272	0.181	0.136	0.091	0.252	0.168	0.126	0.084

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.196	0.797	0.598	0.399	1.196	0.797	0.598	0.399	1.029	0.686	0.514	0.343	0.914	0.610	0.457	0.305	0.714	0.476	0.357	0.238
WRB1	0.604	0.403	0.302	0.201	0.604	0.403	0.302	0.201	0.526	0.350	0.263	0.175	0.471	0.314	0.235	0.157	0.416	0.277	0.208	0.139
WRB2	0.544	0.364	0.273	0.182	0.544	0.364	0.273	0.182	0.474	0.317	0.238	0.159	0.425	0.284	0.213	0.142	0.375	0.250	0.188	0.126
WRC	0.392	0.262	0.196	0.131	0.392	0.262	0.196	0.131	0.345	0.230	0.173	0.115	0.265	0.177	0.133	0.088	0.231	0.154	0.116	0.077

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.082	0.721	0.541	0.361	0.967	0.645	0.484	0.322	0.853	0.569	0.426	0.284	0.783	0.522	0.391	0.261	0.636	0.424	0.318	0.212
WRB1	0.549	0.366	0.275	0.183	0.494	0.330	0.247	0.165	0.439	0.293	0.220	0.146	0.408	0.272	0.204	0.136	0.369	0.246	0.184	0.123
WRB2	0.495	0.331	0.248	0.166	0.446	0.298	0.224	0.149	0.396	0.265	0.199	0.133	0.368	0.246	0.184	0.123	0.333	0.222	0.167	0.112
WRC	0.361	0.241	0.180	0.120	0.322	0.214	0.161	0.107	0.290	0.194	0.145	0.097	0.231	0.154	0.116	0.077	0.211	0.141	0.105	0.070

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.985	0.657	0.492	0.328	0.800	0.533	0.400	0.267	0.721	0.481	0.361	0.240	0.686	0.457	0.343	0.229	0.565	0.377	0.282	0.188
WRB1	0.502	0.335	0.251	0.167	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.353	0.235	0.177	0.118	0.330	0.220	0.165	0.110
WRB2	0.453	0.302	0.227	0.152	0.375	0.250	0.188	0.126	0.340	0.227	0.170	0.114	0.319	0.213	0.160	0.107	0.298	0.199	0.149	0.099
WRC	0.330	0.220	0.165	0.110	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.197	0.131	0.099	0.066	0.184	0.122	0.092	0.061

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.871	0.580	0.435	0.290	0.871	0.580	0.435	0.290	0.747	0.498	0.374	0.249	0.668	0.446	0.334	0.223	0.526	0.350	0.263	0.175
WRB1	0.447	0.298	0.224	0.149	0.447	0.298	0.224	0.149	0.384	0.256	0.192	0.128	0.345	0.230	0.173	0.115	0.306	0.204	0.153	0.102
WRB2	0.404	0.269	0.202	0.135	0.404	0.269	0.202	0.135	0.347	0.232	0.174	0.116	0.312	0.208	0.156	0.105	0.277	0.185	0.138	0.092
WRC	0.290	0.194	0.145	0.097	0.290	0.194	0.145	0.097	0.251	0.167	0.126	0.084	0.197	0.131	0.099	0.066	0.177	0.118	0.088	0.059

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.791	0.528	0.396	0.264	0.712	0.475	0.356	0.237	0.624	0.416	0.312	0.208	0.580	0.387	0.290	0.193	0.471	0.314	0.235	0.157
WRB1	0.408	0.272	0.204	0.136	0.369	0.246	0.184	0.123	0.330	0.220	0.165	0.110	0.298	0.199	0.149	0.099	0.275	0.183	0.137	0.092
WRB2	0.368	0.246	0.184	0.123	0.333	0.222	0.167	0.111	0.298	0.199	0.149	0.100	0.269	0.180	0.135	0.090	0.248	0.166	0.124	0.083
WRC	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.212	0.141	0.106	0.071	0.170	0.113	0.085	0.057	0.156	0.104	0.078	0.052

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.721	0.481	0.361	0.240	0.589	0.393	0.295	0.196	0.536	0.358	0.268	0.179	0.501	0.334	0.251	0.167	0.416	0.277	0.208	0.139
WRB1	0.369	0.246	0.184	0.123	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.259	0.173	0.129	0.086	0.243	0.162	0.122	0.081
WRB2	0.333	0.222	0.167	0.111	0.277	0.185	0.138	0.092	0.248	0.166	0.125	0.083	0.234	0.156	0.118	0.078	0.220	0.147	0.110	0.074
WRC	0.243	0.162	0.122	0.081	0.204	0.136	0.102	0.068	0.180	0.120	0.090	0.060	0.150	0.100	0.075	0.050	0.143	0.095	0.071	0.048

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.720	1.147	0.860	0.573	1.720	1.147	0.860	0.573	1.459	0.973	0.730	0.486	1.281	0.854	0.640	0.427	1.169	0.779	0.585	0.390
WRB1	0.981	0.654	0.490	0.327	0.981	0.654	0.490	0.327	0.840	0.560	0.420	0.280	0.745	0.497	0.373	0.248	0.651	0.434	0.326	0.217
WRB2	0.946	0.589	0.442	0.296	0.946	0.589	0.442	0.296	0.810	0.505	0.379	0.253	0.705	0.449	0.337	0.225	0.586	0.392	0.294	0.196
WRC	0.620	0.413	0.310	0.207	0.620	0.413	0.310	0.207	0.534	0.356	0.267	0.178	0.415	0.277	0.207	0.138	0.367	0.245	0.184	0.122

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.534	1.022	0.767	0.511	1.362	0.908	0.681	0.454	1.191	0.794	0.596	0.397	1.087	0.725	0.544	0.362	1.028	0.685	0.514	0.343
WRB1	0.887	0.591	0.443	0.296	0.792	0.528	0.396	0.264	0.698	0.466	0.349	0.233	0.643	0.429	0.322	0.214	0.581	0.387	0.290	0.194
WRB2	0.855	0.533	0.400	0.267	0.765	0.477	0.358	0.239	0.631	0.420	0.316	0.211	0.579	0.387	0.291	0.194	0.523	0.350	0.263	0.175
WRC	0.565	0.377	0.282	0.188	0.502	0.335	0.251	0.167	0.447	0.298	0.224	0.149	0.354	0.236	0.177	0.118	0.320	0.213	0.160	0.107

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.385	0.923	0.692	0.462	1.109	0.740	0.555	0.370	0.998	0.665	0.499	0.333	0.938	0.625	0.469	0.313	0.910	0.607	0.455	0.303
WRB1	0.800	0.534	0.400	0.267	0.651	0.434	0.326	0.217	0.588	0.392	0.294	0.196	0.557	0.371	0.279	0.186	0.518	0.345	0.259	0.173
WRB2	0.773	0.481	0.361	0.241	0.586	0.392	0.294	0.196	0.531	0.355	0.266	0.178	0.503	0.336	0.252	0.168	0.467	0.312	0.234	0.157
WRC	0.510	0.340	0.255	0.170	0.424	0.282	0.212	0.141	0.377	0.251	0.188	0.126	0.313	0.209	0.156	0.104	0.286	0.190	0.143	0.095

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.983	0.655	0.491	0.328	0.983	0.655	0.491	0.328	0.841	0.561	0.421	0.280	0.745	0.496	0.372	0.248	0.690	0.460	0.345	0.230
WRB1	0.581	0.387	0.290	0.194	0.581	0.387	0.290	0.194	0.502	0.335	0.251	0.167	0.447	0.298	0.224	0.149	0.392	0.262	0.196	0.131
WRB2	0.523	0.350	0.263	0.175	0.523	0.350	0.263	0.175	0.453	0.302	0.227	0.151	0.404	0.269	0.202	0.135	0.354	0.236	0.177	0.119
WRC	0.377	0.251	0.188	0.126	0.377	0.251	0.188	0.126	0.322	0.214	0.161	0.107	0.252	0.168	0.126	0.084	0.224	0.150	0.112	0.075

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.886	0.591	0.443	0.295	0.789	0.526	0.395	0.263	0.700	0.467	0.350	0.233	0.640	0.427	0.320	0.213	0.604	0.403	0.302	0.201
WRB1	0.526	0.350	0.263	0.175	0.471	0.314	0.235	0.157	0.416	0.277	0.208	0.139	0.384	0.256	0.192	0.128	0.345	0.230	0.173	0.115
WRB2	0.474	0.317	0.238	0.159	0.425	0.284	0.213	0.142	0.375	0.251	0.188	0.126	0.347	0.232	0.174	0.116	0.312	0.208	0.156	0.105
WRC	0.337	0.225	0.169	0.112	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.218	0.145	0.109	0.073	0.197	0.131	0.099	0.066

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.804	0.536	0.402	0.268	0.655	0.437	0.328	0.218	0.588	0.392	0.294	0.196	0.551	0.367	0.275	0.184	0.541	0.361	0.271	0.180
WRB1	0.479	0.319	0.239	0.160	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118	0.337	0.225	0.169	0.112	0.314	0.209	0.157	0.105
WRB2	0.432	0.288	0.216	0.144	0.354	0.236	0.177	0.119	0.319	0.213	0.160	0.107	0.305	0.203	0.153	0.102	0.284	0.190	0.142	0.095
WRC	0.306	0.204	0.153	0.102	0.259	0.173	0.129	0.086	0.228	0.152	0.114	0.076	0.190	0.127	0.095	0.063	0.177	0.118	0.088	0.059

METROLL METLOK 500 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.692	0.462	0.346	0.231	0.692	0.462	0.346	0.231	0.596	0.397	0.298	0.199	0.529	0.352	0.264	0.176	0.494	0.330	0.247	0.165
WRB1	0.416	0.277	0.208	0.139	0.416	0.277	0.208	0.139	0.361	0.241	0.180	0.120	0.322	0.214	0.161	0.107	0.282	0.188	0.141	0.094
WRB2	0.375	0.250	0.188	0.125	0.375	0.250	0.188	0.125	0.325	0.217	0.163	0.109	0.290	0.194	0.146	0.097	0.255	0.170	0.128	0.085
WRC	0.267	0.178	0.133	0.089	0.267	0.178	0.133	0.089	0.235	0.157	0.118	0.078	0.184	0.122	0.092	0.061	0.163	0.109	0.082	0.054

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.625	0.417	0.313	0.208	0.566	0.377	0.283	0.189	0.499	0.333	0.249	0.166	0.454	0.303	0.227	0.151	0.432	0.288	0.216	0.144
WRB1	0.377	0.251	0.188	0.126	0.337	0.225	0.169	0.112	0.298	0.199	0.149	0.099	0.275	0.183	0.137	0.092	0.251	0.167	0.126	0.084
WRB2	0.340	0.227	0.170	0.114	0.304	0.203	0.153	0.102	0.269	0.180	0.135	0.090	0.248	0.166	0.124	0.083	0.227	0.151	0.114	0.076
WRC	0.243	0.162	0.122	0.081	0.220	0.146	0.110	0.073	0.196	0.131	0.098	0.065	0.156	0.104	0.078	0.052	0.143	0.095	0.071	0.048

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.573	0.382	0.287	0.191	0.469	0.313	0.235	0.156	0.424	0.283	0.212	0.141	0.395	0.263	0.197	0.132	0.384	0.256	0.192	0.128
WRB1	0.345	0.230	0.173	0.115	0.282	0.188	0.141	0.094	0.259	0.173	0.129	0.086	0.243	0.162	0.122	0.081	0.228	0.152	0.114	0.076
WRB2	0.311	0.208	0.156	0.104	0.255	0.170	0.128	0.085	0.234	0.156	0.117	0.078	0.220	0.147	0.110	0.074	0.206	0.137	0.103	0.069
WRC	0.228	0.152	0.114	0.076	0.188	0.126	0.094	0.063	0.165	0.110	0.082	0.055	0.136	0.091	0.068	0.045	0.129	0.086	0.065	0.043

METROLL METLOK 500 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.514	0.342	0.257	0.171	0.514	0.342	0.257	0.171	0.439	0.293	0.220	0.146	0.395	0.263	0.197	0.132	0.369	0.246	0.184	0.123
WRB1	0.314	0.209	0.157	0.105	0.314	0.209	0.157	0.105	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.212	0.141	0.106	0.071
WRB2	0.283	0.189	0.142	0.095	0.283	0.189	0.142	0.095	0.241	0.161	0.121	0.081	0.220	0.147	0.110	0.074	0.192	0.128	0.096	0.064
WRC	0.204	0.136	0.102	0.068	0.204	0.136	0.102	0.068	0.173	0.115	0.086	0.058	0.136	0.091	0.068	0.045	0.122	0.082	0.061	0.041

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.462	0.308	0.231	0.154	0.417	0.278	0.208	0.139	0.372	0.248	0.186	0.124	0.342	0.228	0.171	0.114	0.322	0.214	0.161	0.107
WRB1	0.282	0.188	0.141	0.094	0.251	0.167	0.126	0.084	0.228	0.152	0.114	0.076	0.212	0.141	0.106	0.071	0.188	0.126	0.094	0.063
WRB2	0.255	0.170	0.128	0.085	0.227	0.151	0.114	0.076	0.206	0.137	0.103	0.069	0.191	0.128	0.096	0.064	0.170	0.113	0.085	0.057
WRC	0.188	0.126	0.094	0.063	0.165	0.110	0.082	0.055	0.149	0.099	0.075	0.050	0.116	0.077	0.058	0.039	0.109	0.073	0.054	0.036

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.424	0.283	0.212	0.141	0.350	0.233	0.175	0.117	0.313	0.208	0.156	0.104	0.298	0.199	0.149	0.099	0.290	0.194	0.145	0.097
WRB1	0.259	0.173	0.129	0.086	0.212	0.141	0.106	0.071	0.196	0.131	0.098	0.065	0.180	0.120	0.090	0.060	0.173	0.115	0.086	0.058
WRB2	0.234	0.156	0.117	0.078	0.192	0.128	0.096	0.064	0.177	0.118	0.089	0.059	0.163	0.109	0.082	0.054	0.156	0.104	0.078	0.052
WRC	0.173	0.115	0.086	0.058	0.141	0.094	0.071	0.047	0.126	0.084	0.063	0.042	0.102	0.068	0.051	0.034	0.095	0.063	0.048	0.032

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	2.009	1.366	1.025	0.683	2.009	1.366	1.025	0.683	1.938	1.292	0.969	0.646	1.864	1.243	0.932	0.621	1.452	0.968	0.726	0.484
WRB1	1.216	0.811	0.608	0.405	1.216	0.811	0.608	0.405	1.044	0.696	0.522	0.348	0.926	0.617	0.463	0.309	0.808	0.539	0.404	0.269
WRB2	1.174	0.730	0.549	0.367	1.174	0.730	0.549	0.367	1.007	0.627	0.471	0.315	0.875	0.557	0.419	0.279	0.728	0.486	0.365	0.244
WRC	0.769	0.513	0.384	0.256	0.769	0.513	0.384	0.256	0.667	0.445	0.333	0.222	0.517	0.345	0.258	0.172	0.449	0.299	0.224	0.150

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.975	1.317	0.988	0.658	1.901	1.267	0.950	0.634	1.817	1.212	0.909	0.606	1.678	1.119	0.839	0.559	1.279	0.853	0.639	0.426
WRB1	1.098	0.732	0.549	0.366	0.981	0.654	0.490	0.327	0.863	0.575	0.432	0.288	0.792	0.528	0.396	0.264	0.714	0.476	0.357	0.238
WRB2	1.060	0.661	0.496	0.331	0.947	0.590	0.443	0.296	0.780	0.519	0.390	0.261	0.714	0.477	0.358	0.239	0.643	0.430	0.323	0.216
WRC	0.698	0.466	0.349	0.233	0.628	0.418	0.314	0.209	0.557	0.371	0.279	0.186	0.442	0.295	0.221	0.147	0.401	0.267	0.201	0.134

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.910	1.273	0.955	0.637	1.715	1.144	0.858	0.572	1.539	1.026	0.770	0.513	1.447	0.964	0.723	0.482	1.130	0.753	0.565	0.377
WRB1	0.996	0.664	0.498	0.332	0.808	0.539	0.404	0.269	0.730	0.486	0.365	0.243	0.690	0.460	0.345	0.230	0.636	0.424	0.318	0.212
WRB2	0.962	0.599	0.450	0.300	0.728	0.486	0.365	0.244	0.658	0.440	0.330	0.220	0.623	0.416	0.312	0.209	0.574	0.383	0.288	0.192
WRC	0.636	0.424	0.318	0.212	0.518	0.345	0.259	0.173	0.471	0.314	0.235	0.157	0.388	0.258	0.194	0.129	0.360	0.240	0.180	0.120

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.511	1.008	0.756	0.504	1.511	1.008	0.756	0.504	1.289	0.859	0.644	0.430	1.150	0.767	0.575	0.383	0.847	0.565	0.424	0.282
WRB1	0.714	0.476	0.357	0.238	0.714	0.476	0.357	0.238	0.620	0.413	0.310	0.207	0.549	0.366	0.275	0.183	0.486	0.324	0.243	0.162
WRB2	0.643	0.430	0.323	0.215	0.643	0.430	0.323	0.215	0.559	0.373	0.280	0.187	0.496	0.331	0.249	0.166	0.439	0.293	0.220	0.147
WRC	0.463	0.309	0.231	0.154	0.463	0.309	0.231	0.154	0.400	0.267	0.200	0.133	0.313	0.209	0.156	0.104	0.272	0.181	0.136	0.091

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.363	0.909	0.682	0.454	1.215	0.810	0.607	0.405	1.076	0.717	0.538	0.359	0.983	0.655	0.491	0.328	0.753	0.502	0.377	0.251
WRB1	0.651	0.434	0.326	0.217	0.581	0.387	0.290	0.194	0.518	0.345	0.259	0.173	0.479	0.319	0.239	0.160	0.432	0.288	0.216	0.144
WRB2	0.587	0.392	0.294	0.196	0.524	0.350	0.263	0.175	0.467	0.312	0.235	0.156	0.432	0.289	0.216	0.144	0.390	0.260	0.195	0.131
WRC	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.337	0.225	0.169	0.112	0.265	0.177	0.133	0.088	0.245	0.163	0.122	0.082

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.233	0.822	0.617	0.411	1.001	0.668	0.501	0.334	0.899	0.600	0.450	0.300	0.853	0.569	0.427	0.284	0.667	0.445	0.333	0.222
WRB1	0.588	0.392	0.294	0.196	0.486	0.324	0.243	0.162	0.439	0.293	0.220	0.146	0.416	0.277	0.208	0.139	0.384	0.256	0.192	0.128
WRB2	0.531	0.354	0.266	0.178	0.439	0.293	0.220	0.147	0.397	0.265	0.199	0.133	0.376	0.251	0.188	0.126	0.347	0.232	0.174	0.116
WRC	0.384	0.256	0.192	0.128	0.314	0.209	0.157	0.105	0.282	0.188	0.141	0.094	0.231	0.154	0.116	0.077	0.218	0.145	0.109	0.073

STEELINE STELL-RIB 500 (ST28) (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.085	0.723	0.542	0.362	1.085	0.723	0.542	0.362	0.937	0.624	0.468	0.312	0.825	0.550	0.413	0.275	0.612	0.408	0.306	0.204
WRB1	0.518	0.345	0.259	0.173	0.518	0.345	0.259	0.173	0.447	0.298	0.224	0.149	0.400	0.267	0.200	0.133	0.353	0.235	0.177	0.118
WRB2	0.467	0.312	0.234	0.156	0.467	0.312	0.234	0.156	0.403	0.269	0.202	0.135	0.361	0.241	0.181	0.121	0.319	0.213	0.160	0.107
WRC	0.337	0.225	0.169	0.112	0.337	0.225	0.169	0.112	0.290	0.194	0.145	0.097	0.224	0.150	0.112	0.075	0.204	0.136	0.102	0.068

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.983	0.655	0.491	0.328	0.881	0.587	0.440	0.294	0.779	0.519	0.389	0.260	0.714	0.476	0.357	0.238	0.541	0.361	0.271	0.180
WRB1	0.471	0.314	0.235	0.157	0.424	0.282	0.212	0.141	0.377	0.251	0.188	0.126	0.345	0.230	0.173	0.115	0.314	0.209	0.157	0.105
WRB2	0.425	0.283	0.213	0.142	0.382	0.255	0.192	0.128	0.340	0.227	0.171	0.114	0.312	0.208	0.156	0.104	0.283	0.189	0.142	0.095
WRC	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.243	0.162	0.122	0.081	0.197	0.131	0.099	0.066	0.177	0.118	0.088	0.059

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.890	0.593	0.445	0.297	0.723	0.482	0.362	0.241	0.658	0.439	0.329	0.219	0.621	0.414	0.311	0.207	0.486	0.324	0.243	0.162
WRB1	0.432	0.288	0.216	0.144	0.353	0.235	0.177	0.118	0.322	0.214	0.161	0.107	0.306	0.204	0.153	0.102	0.282	0.188	0.141	0.094
WRB2	0.389	0.260	0.195	0.130	0.319	0.213	0.160	0.107	0.291	0.194	0.146	0.097	0.277	0.184	0.139	0.093	0.255	0.171	0.128	0.085
WRC	0.282	0.188	0.141	0.094	0.235	0.157	0.118	0.078	0.212	0.141	0.106	0.071	0.170	0.113	0.085	0.057	0.163	0.109	0.082	0.054

STEELINE STELL-RIB 500 (ST28) (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.788	0.525	0.394	0.263	0.788	0.525	0.394	0.263	0.677	0.451	0.338	0.226	0.612	0.408	0.306	0.204	0.455	0.303	0.228	0.152
WRB1	0.384	0.256	0.192	0.128	0.384	0.256	0.192	0.128	0.337	0.225	0.169	0.112	0.298	0.199	0.149	0.099	0.267	0.178	0.133	0.089
WRB2	0.347	0.232	0.174	0.116	0.347	0.232	0.174	0.116	0.305	0.203	0.153	0.102	0.269	0.180	0.135	0.090	0.241	0.161	0.121	0.080
WRC	0.251	0.167	0.126	0.084	0.251	0.167	0.126	0.084	0.220	0.146	0.110	0.073	0.170	0.113	0.085	0.057	0.150	0.100	0.075	0.050

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.714	0.476	0.357	0.238	0.640	0.427	0.320	0.213	0.566	0.377	0.283	0.189	0.529	0.352	0.264	0.176	0.400	0.267	0.200	0.133
WRB1	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105	0.282	0.188	0.141	0.094	0.259	0.173	0.129	0.086	0.235	0.157	0.118	0.078
WRB2	0.319	0.213	0.160	0.106	0.283	0.189	0.142	0.095	0.255	0.171	0.128	0.085	0.234	0.156	0.117	0.078	0.213	0.142	0.107	0.071
WRC	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.188	0.126	0.094	0.063	0.150	0.100	0.075	0.050	0.136	0.091	0.068	0.045

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.649	0.433	0.325	0.216	0.538	0.359	0.269	0.179	0.482	0.321	0.241	0.161	0.454	0.303	0.227	0.151	0.361	0.241	0.180	0.120
WRB1	0.322	0.214	0.161	0.107	0.267	0.178	0.133	0.089	0.235	0.157	0.118	0.078	0.228	0.152	0.114	0.076	0.212	0.141	0.106	0.071
WRB2	0.290	0.194	0.146	0.097	0.241	0.161	0.121	0.080	0.213	0.142	0.107	0.071	0.206	0.137	0.103	0.069	0.191	0.128	0.096	0.064
WRC	0.212	0.141	0.106	0.071	0.173	0.115	0.086	0.058	0.157	0.105	0.078	0.052	0.129	0.086	0.065	0.043	0.122	0.082	0.061	0.041

PV-ezRack Commercial Tilt interface spacing table for
REVOLUTION MAXLINE 340

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.879	1.252	0.939	0.626	1.879	1.252	0.939	0.626	1.777	1.184	0.888	0.592	1.709	1.139	0.854	0.570	1.499	0.999	0.749	0.500
WRB1	1.412	0.942	0.706	0.471	1.412	0.942	0.706	0.471	1.342	0.894	0.671	0.447	1.295	0.863	0.647	0.432	1.232	0.821	0.616	0.411
WRB2	1.363	0.848	0.637	0.426	1.363	0.848	0.637	0.426	1.294	0.807	0.606	0.404	1.224	0.779	0.585	0.391	1.109	0.741	0.557	0.371
WRC	1.216	0.811	0.608	0.405	1.216	0.811	0.608	0.405	1.153	0.769	0.577	0.384	0.966	0.644	0.483	0.322	0.904	0.603	0.452	0.301

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.811	1.207	0.905	0.603	1.743	1.162	0.871	0.581	1.666	1.111	0.833	0.555	1.615	1.077	0.808	0.538	1.436	0.957	0.718	0.479
WRB1	1.365	0.910	0.683	0.455	1.318	0.879	0.659	0.439	1.263	0.842	0.632	0.421	1.224	0.816	0.612	0.408	1.185	0.790	0.592	0.395
WRB2	1.317	0.821	0.616	0.411	1.272	0.793	0.596	0.398	1.141	0.760	0.571	0.382	1.102	0.737	0.554	0.369	1.067	0.713	0.536	0.358
WRC	1.177	0.785	0.588	0.392	1.138	0.781	0.586	0.390	1.069	0.713	0.535	0.356	0.884	0.589	0.442	0.295	0.802	0.535	0.401	0.267

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.751	1.167	0.875	0.584	1.624	1.082	0.812	0.541	1.564	1.043	0.782	0.521	1.539	1.026	0.769	0.513	1.381	0.921	0.690	0.460
WRB1	1.326	0.884	0.663	0.442	1.232	0.821	0.616	0.411	1.193	0.795	0.596	0.398	1.169	0.779	0.585	0.390	1.138	0.781	0.586	0.390
WRB2	1.280	0.797	0.599	0.400	1.109	0.741	0.557	0.371	1.075	0.719	0.539	0.360	1.055	0.704	0.529	0.353	1.027	0.706	0.530	0.354
WRC	1.138	0.758	0.586	0.390	1.023	0.682	0.512	0.341	0.923	0.615	0.462	0.308	0.768	0.512	0.384	0.256	0.714	0.476	0.357	0.238

PV-ezRack Commercial Tilt interface spacing table for
REVOLUTION MAXLINE 340 (Cont.)

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.556	1.037	0.778	0.519	1.556	1.037	0.778	0.519	1.479	0.986	0.740	0.493	1.420	0.946	0.710	0.473	1.255	0.837	0.628	0.418
WRB1	1.185	0.790	0.592	0.395	1.185	0.790	0.592	0.395	1.130	0.753	0.565	0.377	1.115	0.743	0.557	0.372	1.002	0.668	0.477	0.318
WRB2	1.067	0.713	0.536	0.357	1.067	0.713	0.536	0.357	1.019	0.680	0.511	0.341	1.006	0.671	0.504	0.336	0.904	0.603	0.431	0.288
WRC	0.953	0.635	0.477	0.318	0.953	0.635	0.477	0.318	0.824	0.549	0.412	0.275	0.619	0.413	0.309	0.206	0.544	0.363	0.272	0.181

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.505	1.003	0.752	0.502	1.454	0.969	0.727	0.485	1.386	0.924	0.693	0.462	1.352	0.901	0.676	0.451	1.200	0.800	0.600	0.400
WRB1	1.146	0.764	0.573	0.382	1.106	0.738	0.569	0.380	1.066	0.711	0.508	0.338	0.977	0.652	0.489	0.310	0.888	0.592	0.423	0.282
WRB2	1.033	0.690	0.518	0.345	0.998	0.667	0.515	0.343	0.962	0.643	0.460	0.307	0.882	0.589	0.442	0.281	0.802	0.536	0.383	0.256
WRC	0.864	0.576	0.432	0.288	0.753	0.517	0.388	0.258	0.667	0.458	0.343	0.229	0.537	0.358	0.269	0.179	0.483	0.322	0.241	0.161

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.454	0.969	0.727	0.485	1.360	0.907	0.680	0.453	1.309	0.873	0.655	0.436	1.284	0.856	0.661	0.440	1.153	0.769	0.577	0.384
WRB1	1.114	0.743	0.557	0.382	1.002	0.668	0.477	0.318	0.905	0.603	0.431	0.287	0.848	0.565	0.424	0.269	0.792	0.528	0.396	0.251
WRB2	1.005	0.671	0.504	0.346	0.904	0.603	0.431	0.288	0.818	0.546	0.390	0.260	0.767	0.511	0.384	0.244	0.715	0.478	0.359	0.227
WRC	0.761	0.522	0.392	0.261	0.628	0.431	0.323	0.215	0.590	0.393	0.295	0.197	0.469	0.313	0.235	0.156	0.435	0.290	0.218	0.145

PV-ezRack Commercial Tilt interface spacing table for

REVOLUTION MAXLINE 340 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.394	0.929	0.697	0.465	1.394	0.929	0.697	0.465	1.326	0.884	0.663	0.442	1.275	0.850	0.638	0.425	1.130	0.753	0.565	0.377
WRB1	1.044	0.696	0.522	0.348	1.044	0.696	0.522	0.348	0.902	0.602	0.451	0.301	0.808	0.539	0.404	0.269	0.706	0.471	0.353	0.235
WRB2	0.940	0.628	0.472	0.315	0.940	0.628	0.472	0.315	0.814	0.543	0.408	0.272	0.729	0.487	0.366	0.244	0.637	0.425	0.319	0.213
WRC	0.675	0.450	0.337	0.225	0.675	0.450	0.337	0.225	0.588	0.392	0.294	0.196	0.456	0.304	0.228	0.152	0.401	0.267	0.201	0.134

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.352	0.901	0.676	0.451	1.301	0.867	0.650	0.434	1.250	0.833	0.625	0.417	1.216	0.810	0.608	0.405	1.083	0.722	0.541	0.361
WRB1	0.949	0.633	0.475	0.316	0.855	0.570	0.428	0.285	0.753	0.502	0.377	0.251	0.698	0.466	0.349	0.233	0.628	0.418	0.314	0.209
WRB2	0.856	0.572	0.429	0.286	0.772	0.515	0.387	0.258	0.680	0.455	0.341	0.228	0.630	0.421	0.316	0.211	0.567	0.379	0.284	0.190
WRC	0.612	0.408	0.306	0.204	0.557	0.371	0.279	0.186	0.494	0.330	0.247	0.165	0.394	0.263	0.197	0.131	0.354	0.236	0.177	0.118

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.309	0.873	0.655	0.436	1.224	0.816	0.612	0.408	1.182	0.788	0.591	0.394	1.139	0.759	0.570	0.380	0.973	0.649	0.486	0.324
WRB1	0.863	0.575	0.432	0.288	0.706	0.471	0.353	0.235	0.643	0.429	0.322	0.214	0.604	0.403	0.302	0.201	0.565	0.377	0.282	0.188
WRB2	0.778	0.520	0.390	0.260	0.637	0.425	0.319	0.213	0.582	0.388	0.291	0.194	0.546	0.364	0.274	0.183	0.511	0.341	0.256	0.170
WRC	0.557	0.371	0.279	0.186	0.463	0.309	0.231	0.154	0.416	0.277	0.208	0.139	0.340	0.227	0.170	0.113	0.320	0.213	0.160	0.107

REVOLUTION MAXLINE 340 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.250	0.833	0.625	0.417	1.250	0.833	0.625	0.417	1.190	0.793	0.595	0.397	1.114	0.742	0.557	0.371	0.902	0.602	0.451	0.301
WRB1	0.769	0.513	0.384	0.256	0.769	0.513	0.384	0.256	0.667	0.445	0.333	0.222	0.596	0.398	0.298	0.199	0.526	0.350	0.263	0.175
WRB2	0.694	0.463	0.348	0.232	0.694	0.463	0.348	0.232	0.602	0.402	0.302	0.201	0.539	0.360	0.269	0.181	0.475	0.317	0.237	0.158
WRC	0.502	0.335	0.251	0.167	0.502	0.335	0.251	0.167	0.439	0.293	0.220	0.146	0.340	0.227	0.170	0.113	0.299	0.199	0.150	0.100

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.216	0.810	0.608	0.405	1.173	0.782	0.587	0.391	1.046	0.697	0.523	0.349	0.960	0.640	0.480	0.320	0.800	0.534	0.400	0.267
WRB1	0.698	0.466	0.349	0.233	0.628	0.418	0.314	0.209	0.557	0.371	0.279	0.186	0.518	0.345	0.259	0.173	0.471	0.314	0.235	0.157
WRB2	0.631	0.421	0.316	0.211	0.567	0.378	0.284	0.190	0.504	0.336	0.252	0.168	0.468	0.313	0.234	0.156	0.426	0.284	0.213	0.142
WRC	0.455	0.303	0.228	0.152	0.416	0.277	0.208	0.139	0.369	0.246	0.184	0.123	0.292	0.195	0.146	0.097	0.265	0.177	0.133	0.088

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.173	0.782	0.587	0.391	0.977	0.652	0.489	0.326	0.884	0.589	0.442	0.295	0.842	0.561	0.421	0.281	0.722	0.481	0.361	0.241
WRB1	0.636	0.424	0.318	0.212	0.526	0.350	0.263	0.175	0.479	0.319	0.239	0.160	0.447	0.298	0.224	0.149	0.416	0.277	0.208	0.139
WRB2	0.574	0.383	0.288	0.192	0.475	0.317	0.237	0.158	0.433	0.289	0.217	0.145	0.405	0.270	0.203	0.135	0.376	0.251	0.189	0.126
WRC	0.416	0.277	0.208	0.139	0.345	0.230	0.173	0.115	0.314	0.209	0.157	0.105	0.258	0.172	0.129	0.086	0.238	0.159	0.119	0.079

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.697	1.131	0.848	0.566	1.697	1.131	0.848	0.566	1.437	0.958	0.719	0.479	1.270	0.847	0.635	0.423	0.934	0.622	0.467	0.311
WRB1	0.777	0.518	0.388	0.259	0.777	0.518	0.388	0.259	0.667	0.445	0.333	0.222	0.596	0.398	0.298	0.199	0.518	0.345	0.259	0.173
WRB2	0.750	0.467	0.350	0.234	0.750	0.467	0.350	0.234	0.643	0.401	0.301	0.201	0.564	0.359	0.270	0.180	0.466	0.312	0.234	0.156
WRC	0.494	0.330	0.247	0.165	0.494	0.330	0.247	0.165	0.424	0.282	0.212	0.141	0.326	0.218	0.163	0.109	0.292	0.195	0.146	0.097

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.521	1.014	0.760	0.507	1.345	0.896	0.672	0.448	1.178	0.785	0.589	0.393	1.076	0.717	0.538	0.359	0.816	0.544	0.408	0.272
WRB1	0.698	0.466	0.349	0.233	0.628	0.418	0.314	0.209	0.557	0.371	0.279	0.186	0.510	0.340	0.255	0.170	0.455	0.303	0.228	0.152
WRB2	0.674	0.420	0.315	0.210	0.606	0.378	0.284	0.189	0.503	0.335	0.252	0.168	0.459	0.307	0.231	0.154	0.410	0.274	0.206	0.137
WRC	0.447	0.298	0.224	0.149	0.400	0.267	0.200	0.133	0.353	0.235	0.177	0.118	0.286	0.190	0.143	0.095	0.258	0.172	0.129	0.086

ANGLE TO THE HORIZONTAL	$0^\circ \leq \alpha < 10^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	1.363	0.909	0.682	0.454	1.103	0.736	0.552	0.368	0.983	0.655	0.491	0.328	0.927	0.618	0.464	0.309	0.722	0.481	0.361	0.241
WRB1	0.636	0.424	0.318	0.212	0.518	0.345	0.259	0.173	0.471	0.314	0.235	0.157	0.439	0.293	0.220	0.146	0.408	0.272	0.204	0.136
WRB2	0.613	0.382	0.287	0.192	0.466	0.312	0.234	0.156	0.424	0.284	0.213	0.142	0.396	0.265	0.199	0.133	0.368	0.246	0.185	0.123
WRC	0.408	0.272	0.204	0.136	0.337	0.225	0.169	0.112	0.298	0.199	0.149	0.099	0.245	0.163	0.122	0.082	0.231	0.154	0.116	0.077

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
 Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
 Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.964	0.643	0.482	0.321	0.964	0.643	0.482	0.321	0.825	0.550	0.413	0.275	0.733	0.488	0.366	0.244	0.541	0.361	0.271	0.180
WRB1	0.455	0.303	0.228	0.152	0.455	0.303	0.228	0.152	0.392	0.262	0.196	0.131	0.353	0.235	0.177	0.118	0.314	0.209	0.157	0.105
WRB2	0.410	0.274	0.206	0.137	0.410	0.274	0.206	0.137	0.354	0.236	0.177	0.118	0.319	0.213	0.160	0.106	0.283	0.189	0.142	0.095
WRC	0.298	0.199	0.149	0.099	0.298	0.199	0.149	0.099	0.259	0.173	0.129	0.086	0.197	0.131	0.099	0.066	0.177	0.118	0.088	0.059

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.872	0.581	0.436	0.291	0.779	0.519	0.389	0.260	0.686	0.457	0.343	0.229	0.631	0.420	0.315	0.210	0.479	0.319	0.239	0.160
WRB1	0.416	0.277	0.208	0.139	0.377	0.251	0.188	0.126	0.330	0.220	0.165	0.110	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092
WRB2	0.375	0.250	0.188	0.125	0.340	0.227	0.170	0.114	0.297	0.199	0.149	0.100	0.276	0.185	0.138	0.092	0.248	0.166	0.124	0.083
WRC	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081	0.212	0.141	0.106	0.071	0.170	0.113	0.085	0.057	0.156	0.104	0.078	0.052

ANGLE TO THE HORIZONTAL	$10 \leq \alpha < 15^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.788	0.525	0.394	0.263	0.640	0.427	0.320	0.213	0.575	0.383	0.287	0.192	0.547	0.365	0.274	0.182	0.424	0.282	0.212	0.141
WRB1	0.377	0.251	0.188	0.126	0.314	0.209	0.157	0.105	0.282	0.188	0.141	0.094	0.267	0.178	0.133	0.089	0.243	0.162	0.122	0.081
WRB2	0.340	0.227	0.170	0.114	0.283	0.189	0.142	0.095	0.255	0.170	0.128	0.085	0.241	0.161	0.121	0.081	0.220	0.147	0.110	0.073
WRC	0.243	0.162	0.122	0.081	0.204	0.136	0.102	0.068	0.180	0.120	0.090	0.060	0.150	0.100	0.075	0.050	0.143	0.095	0.071	0.048

STEELINE LOKDECK 680 (Cont.)

Type of Rail	ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface	ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension	2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.695	0.464	0.348	0.232	0.695	0.464	0.348	0.232	0.593	0.396	0.297	0.198	0.529	0.352	0.264	0.176	0.392	0.262	0.196	0.131
WRB1	0.337	0.225	0.169	0.112	0.337	0.225	0.169	0.112	0.290	0.194	0.145	0.097	0.259	0.173	0.129	0.086	0.228	0.152	0.114	0.076
WRB2	0.304	0.203	0.153	0.102	0.304	0.203	0.153	0.102	0.262	0.175	0.131	0.088	0.234	0.156	0.117	0.078	0.205	0.137	0.103	0.069
WRC	0.220	0.146	0.110	0.073	0.220	0.146	0.110	0.073	0.188	0.126	0.094	0.063	0.150	0.100	0.075	0.050	0.129	0.086	0.065	0.043

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.631	0.420	0.315	0.210	0.566	0.377	0.283	0.189	0.501	0.334	0.250	0.167	0.454	0.303	0.227	0.151	0.353	0.235	0.177	0.118
WRB1	0.306	0.204	0.153	0.102	0.275	0.183	0.137	0.092	0.243	0.162	0.122	0.081	0.220	0.146	0.110	0.073	0.204	0.136	0.102	0.068
WRB2	0.276	0.184	0.138	0.092	0.248	0.165	0.124	0.083	0.219	0.147	0.110	0.073	0.198	0.132	0.099	0.066	0.184	0.123	0.092	0.062
WRC	0.196	0.131	0.098	0.065	0.180	0.120	0.090	0.060	0.157	0.105	0.078	0.052	0.129	0.086	0.065	0.043	0.116	0.077	0.058	0.039

ANGLE TO THE HORIZONTAL	15° ≤ α < 20°																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				5<H≤10				10<H≤15				15<H≤20				20<H≤30			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.566	0.377	0.283	0.189	0.464	0.309	0.232	0.155	0.417	0.278	0.209	0.139	0.399	0.266	0.199	0.133	0.314	0.209	0.157	0.105
WRB1	0.275	0.183	0.137	0.092	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.196	0.131	0.098	0.065	0.180	0.120	0.090	0.060
WRB2	0.248	0.165	0.124	0.083	0.205	0.137	0.103	0.069	0.184	0.123	0.092	0.062	0.177	0.118	0.089	0.059	0.163	0.109	0.082	0.054
WRC	0.180	0.120	0.090	0.060	0.149	0.099	0.075	0.050	0.133	0.089	0.067	0.044	0.109	0.073	0.054	0.036	0.102	0.068	0.051	0.034

Type of Rail ER-R-ECO (Refer to Note 6 for other compatible rails)
Type of Interface ER-I-34 and ER-I-09 (Refer to Note 6 for interface versions)
Solar Panel Dimension 2 m x 1 m (Refer to Note 19 for other panel sizes)

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	3																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.501	0.334	0.250	0.167	0.501	0.334	0.250	0.167	0.436	0.291	0.218	0.145	0.389	0.260	0.195	0.130	0.290	0.194	0.145	0.097
WRB1	0.243	0.162	0.122	0.081	0.243	0.162	0.122	0.081	0.212	0.141	0.106	0.071	0.196	0.131	0.098	0.065	0.173	0.115	0.086	0.058
WRB2	0.220	0.146	0.110	0.073	0.220	0.146	0.110	0.073	0.191	0.128	0.096	0.064	0.177	0.118	0.089	0.059	0.156	0.104	0.078	0.052
WRC	0.165	0.110	0.082	0.055	0.165	0.110	0.082	0.055	0.141	0.094	0.071	0.047	0.109	0.073	0.054	0.036	0.095	0.063	0.048	0.032

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2.5																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.454	0.303	0.227	0.151	0.408	0.272	0.204	0.136	0.362	0.241	0.181	0.121	0.334	0.223	0.167	0.111	0.259	0.173	0.129	0.086
WRB1	0.228	0.152	0.114	0.076	0.204	0.136	0.102	0.068	0.180	0.120	0.090	0.060	0.165	0.110	0.082	0.055	0.149	0.099	0.075	0.050
WRB2	0.205	0.137	0.103	0.069	0.184	0.123	0.092	0.062	0.163	0.109	0.082	0.055	0.149	0.099	0.074	0.050	0.135	0.090	0.067	0.045
WRC	0.149	0.099	0.075	0.050	0.133	0.089	0.067	0.044	0.118	0.078	0.059	0.039	0.095	0.063	0.048	0.032	0.088	0.059	0.044	0.029

ANGLE TO THE HORIZONTAL	$\alpha = 20^\circ$																			
TC	2																			
BUILDING HEIGHT (m)	≤ 5				$5 < H \leq 10$				$10 < H \leq 15$				$15 < H \leq 20$				$20 < H \leq 30$			
	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner	Internal	Intermediate	Edge	Corner
WRA	0.417	0.278	0.209	0.139	0.343	0.229	0.172	0.114	0.315	0.210	0.158	0.105	0.297	0.198	0.148	0.099	0.228	0.152	0.114	0.076
WRB1	0.204	0.136	0.102	0.068	0.173	0.115	0.086	0.058	0.157	0.105	0.078	0.052	0.149	0.099	0.075	0.050	0.133	0.089	0.067	0.044
WRB2	0.184	0.123	0.092	0.062	0.156	0.104	0.078	0.052	0.142	0.095	0.071	0.047	0.135	0.090	0.068	0.045	0.121	0.080	0.060	0.040
WRC	0.133	0.089	0.067	0.044	0.110	0.073	0.055	0.037	0.102	0.068	0.051	0.034	0.082	0.054	0.041	0.027	#VALUE!	#VALUE!	#VALUE!	#VALUE!

General Notes

Note 1. Rails cannot run parallel to the ribs unless the applicable table spacings are equal or larger the purlin distance. Contact Clenergy if you are unable to comply with this condition or any of the installation specifications listed on this document.

Note 2. The spacing information in this document has been designed to be compliant with the capacity of the below items per roof area:

- Klip-lok clamp
- Roofing sheet
- Fixing clip between roofing sheet to purlin

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

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



Note 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. Therefore, it is recommended to assess the roof structure before installing PV systems.

Note 4. Maximum roof pitch of 5°.

Note 5. Panels to be installed only as per figure 1 configuration.

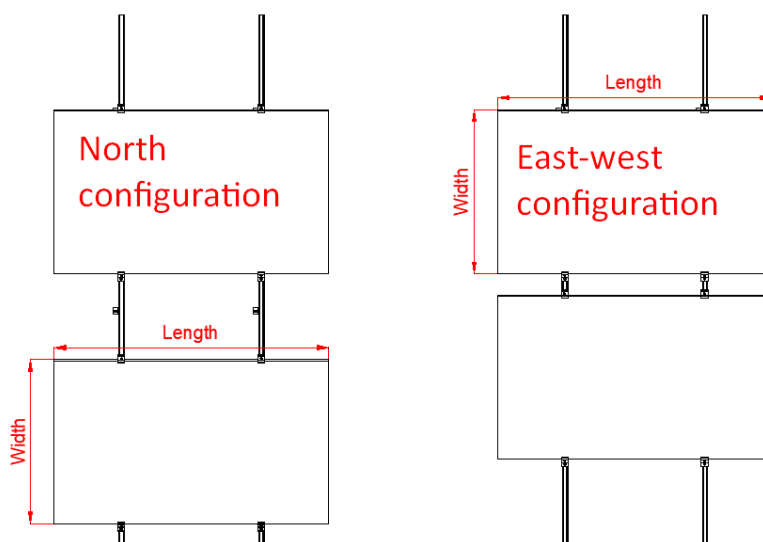


Figure 1. Panel configuration

Note 6. The following components are satisfied for use according to AS/NZS 1664.1:1997-Amdt 1:1999 and AS/NZS 1170.2:2021.

Components	Part No.	Description
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
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
Interface	ER-I-05	Tin Interface
Interface	ER-I-05/CM	Tin Interface with Click Module
Interface	ER-I-05A/EZC/ECO	Tin Interface with ezClick
Black Interface	ER-I-05/BA	Black Tin Interface
Cross Connector Clamp	CRC-R/ECO CRC-R/ECO-ZBW	Cross Connector Clamp
Cross Connector Clamp Plate	K-CRC/PT	Cross Connector Clamp Plate for ER-I-34
Front Leg	FL-COMT/Z/G/5	Commercial Tilt 5° Front Leg
Rear Leg	RL-COMT/Z/G/5	Commercial Tilt 5° Rear Leg
Front Leg	FL-COMTZ/G/10V2	Front leg, commercial tilt 10 degrees, version 2

Back Leg	RL-COMT/Z/G/10V2	Back leg, commercial tilt 10 degrees, version 2
Front Leg	FL-COMTZ/G/15	Front leg, commercial tilt 15 degrees
Back Leg	RL-E-COMT/G/15	Back leg, commercial tilt 15 degrees
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 7. For Terrain Category (TC) definition. Refer to clause 4.2.1 of AS/NZS 1170.2:2021 for more information.

Note 8. Topographic Multiplier (Mt) taken as 1.0. Refer to clause 4.4 of AS/NZS 1170.2:2021 for more information.

Note 9. Shielding Multiplier (Ms) taken as 1.0. Refer to clause 4.3 of AS/NZS 1170.2:2021 for more information.

Note 10. Wind Direction Multiplier (Md) taken as 1.0. Refer to clause 3.3 of AS/NZS 1170.2:2021 for more information.

Note 11. Clamping zone of the PV panels should be according to the manufacturer's specifications.

Note 12. Capacities checked and compared against testing data from Clenergy Australia and NATA certified testing.

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 contact Clenergy Australia or check the website for the latest guides.

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. Installation to be done only on top of the purlins. Exclusions 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 Repot No.
Lysaght KLIP-LOK 700 Classic	NA	MT-19/0633-A
Lysaght KLIP-LOK 700 Hi-Strength	NA	MT-11/023
Lysaght KLIP-LOK 406	NA	MT-17/001-A
Stramit Speed Deck Ultra	NA	MT-11/023
Fielders Kingklip 700	NA	MT-11/280
Stratco Topdeck 700	NA	MT-17/001-B and MT-19/1007
Lysaght Longline 305	NA	MT-13/133
Metroll Metlok 700	Exclude lapjoints	MT-19/0633-B
Stramit Speed Deck 500	NA	MT-19/0762
Rev-klip 700	NA	MT-19/1018-A
Metroll Metlok 500	Exclude lapjoints	7530/MJ
Steeline Steel-Rib 500	NA	MT-19/1090-B
Revolution Maxline 340	NA	MT-19/1018-B
Steeline Lokdeck 680	NA	20-0028

Contact Clenergy for a project specific assessment if you cannot comply with the above exclusion. Refer to figure 2, 3 and 4 to find clamp position, rib type and location on respective roof sheet.

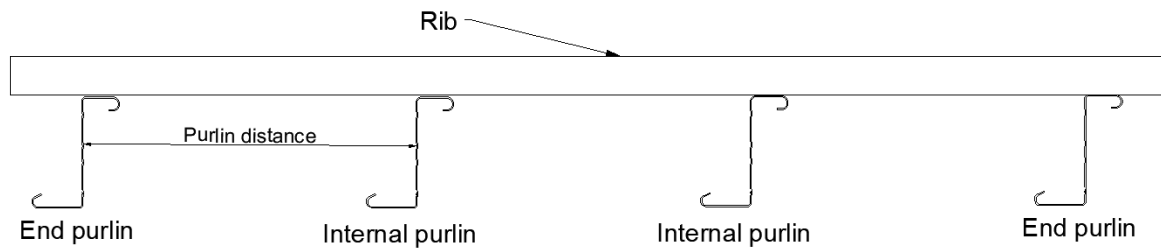


Figure 2. Purlin distance reference

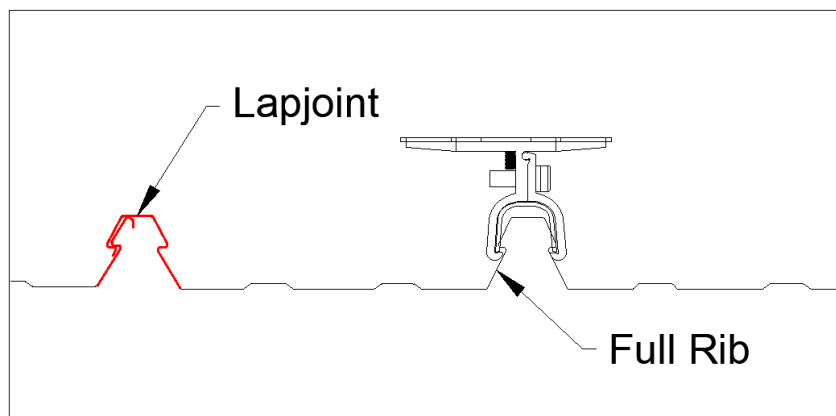
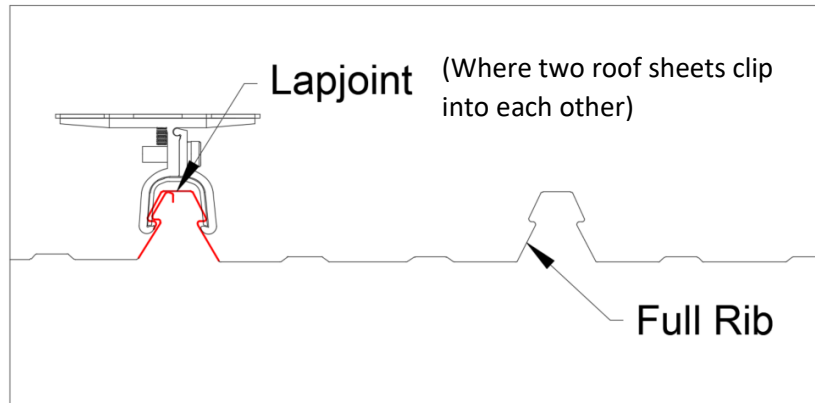


Figure 3. full rib and lapjoint reference

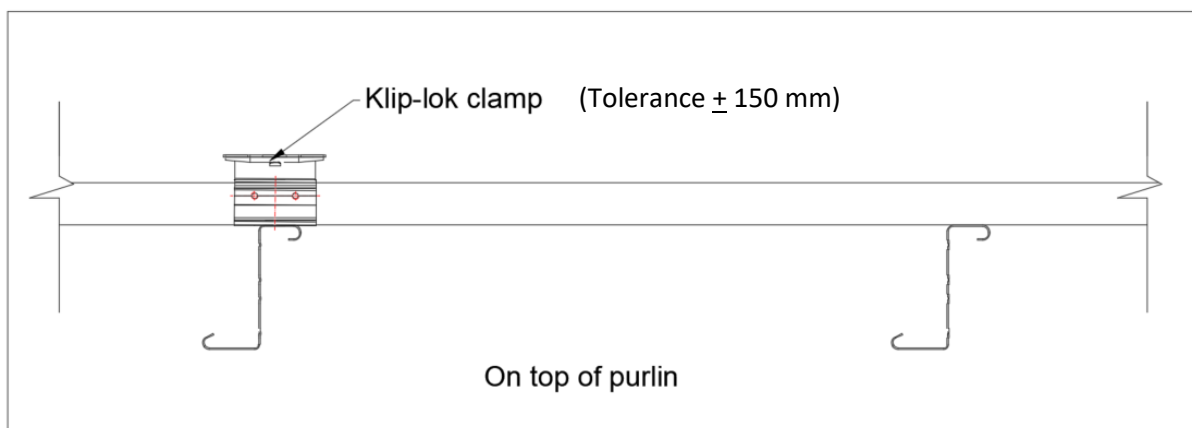


Figure 4. Clamp position on top of the purlin

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 B1	Wind Region B2	Wind Region C
-70%	-75%	-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	- Purlin distance shall not exceed 2m. - Exclude lapjoints	MT- 20-0661

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 (mm)	Spacing +/- W.R – A & B1	Spacing +/- W.R – B2, C & D
2 rails	≤ 1700	+ 6 %	+ 10 %
3 rails	≤ 1700	+ 12 %	+ 18 %
2 rails	≤ 1800	+ 4 %	+ 7 %
3 rails	≤ 1800	+ 12 %	+ 15 %
2 rails	≤ 1900	0 %	+ 5 %
3 rails	≤ 1900	+ 10 %	+ 15 %
2 rails	≤ 2000	0 %	0 %
3 rails	≤ 2000	+ 10 %	+ 15 %
2 rails	≤ 2100	- 10 %	- 6 %
3 rails	≤ 2100	+ 7 %	+ 12 %
2 rails	≤ 2200	- 18 %	- 12 %
3 rails	≤ 2200	+ 5 %	+ 10 %
2 rails	≤ 2300	- 20 %	- 12 %
3 rails	≤ 2300	+ 5 %	+ 12 %
2 rails	≤ 2400	- 25 %	- 15 %
3 rails	≤ 2400	+ 5 %	+ 10 %

Note 20. Panel width cannot exceed 1.20 m for any of the above panel length dimensions and panel weight cannot exceed 15 kg/m².

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 information refer to AS4312.

Note 22. Maximum permitted rail overhang for fixing spacings equal or over 700 mm to be 150 mm. For fixing spacings less than 700 mm, rail overhang should be 50 mm. This applies to standard and East-West installations. Refer to figure 2 and 3 for more information.

Note 23. Excess rail shall be cut accordingly. Refer to installation manual for more information.

Note 24. The fixing spacings are based on the solar panel row spacing (Figure 5) of up to 400 mm. When the row spacing (Figure 5) is over 400 mm an interface spacing increase factor of 5% can be applied. When the row spacing (Figure 5) is over 650 mm an interface spacing increase factor of 20% can be applied.

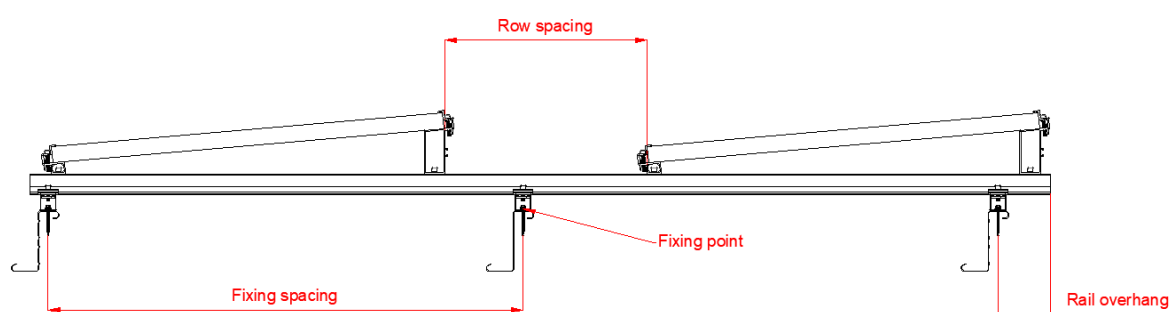


Figure 5. COMT installation configuration (reference only)

Note 25. For **East-West** installation, when the row spacing (Figure 6) is over 400 mm an interface spacing increase factor of 5% can be applied. When the row spacing (Figure 6) is over 650 mm an interface spacing increase factor of 20% can be applied.

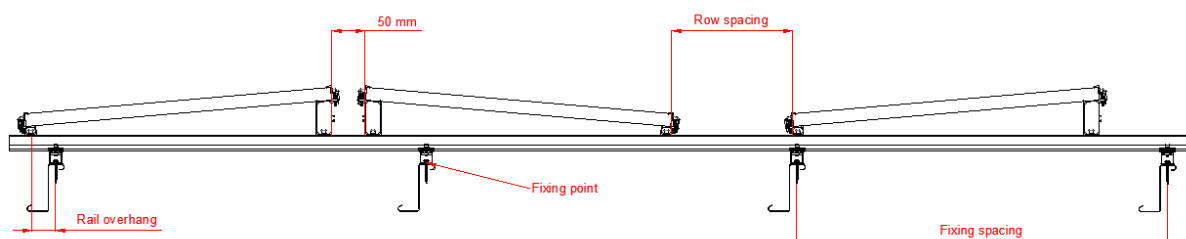


Figure 6. E-W COMT installation configuration (reference only)

Fixing spacings are based on a row spacing of 400 mm (Figure 5 and 6). Reduction and increase factors to be applied for other row spacings as per the below table.

Row spacing	Spacing +/- (North facing)	Spacing +/- (East-West)
0 mm to < 200 mm	- 20 %	- 20 %
< 200 to < 400 mm	-10%	-10%
< 400 mm to < 650 mm	Apply the same table spacings	Apply the same table spacings
> 650 mm	+20%	+ 10 %

Note 26. Same fixing tables on this document can be used for East-West systems.

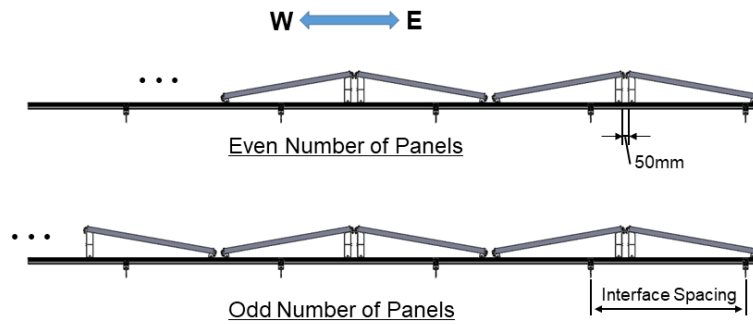
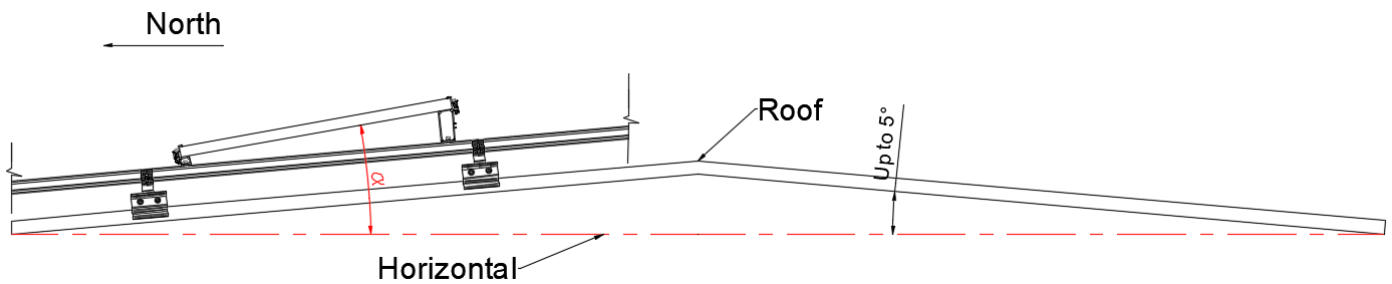


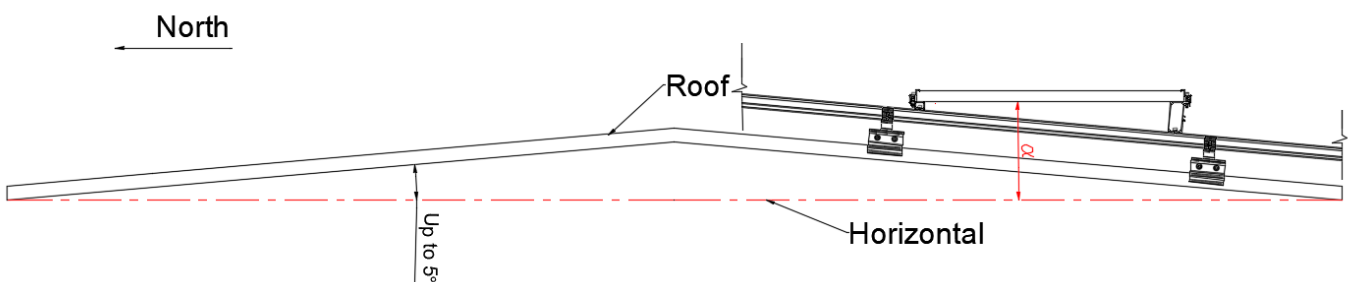
Figure 6. E-W orientation

Note 27. Base rail between panel rows should run continuous from the first panel row to the last. **Note 28.** Final tilt “ α ” identification as per pictures below.

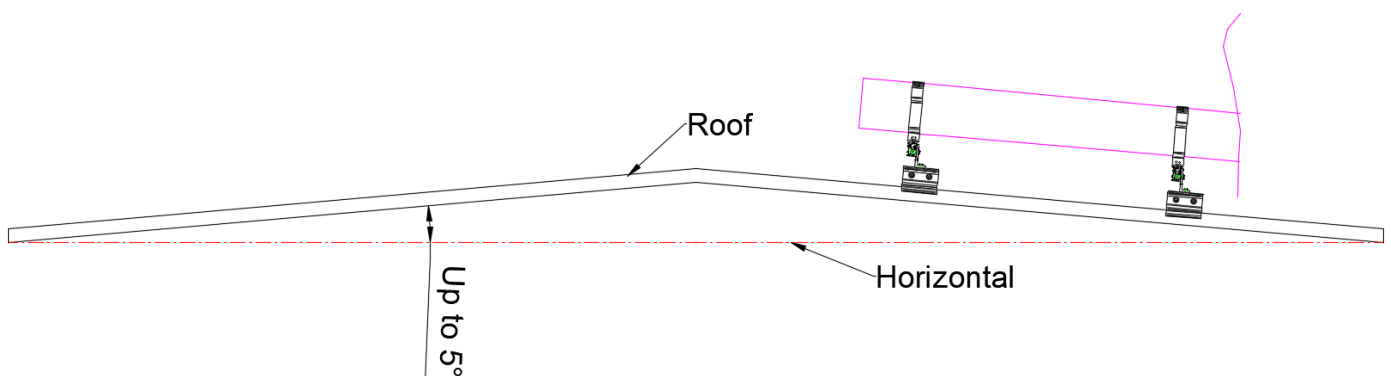
Standard tilt

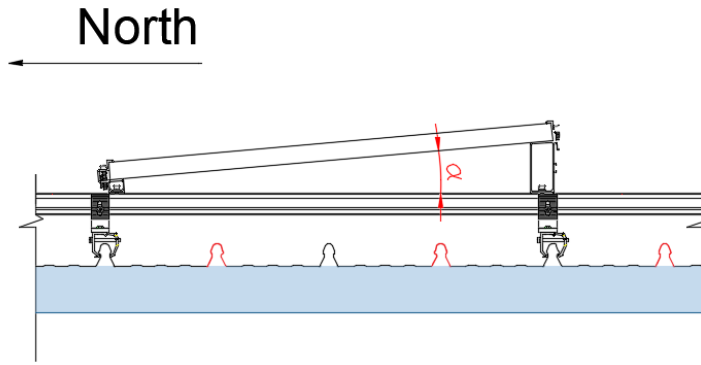


Reverse tilt



ECO – Rail perpendicular to ribs





Note 29. Clamping zone of the PV panels should be according to the manufacturer's specifications.

Note 30. The more conservative spacing has to be used if one panel or panel row fall between two roof zones.

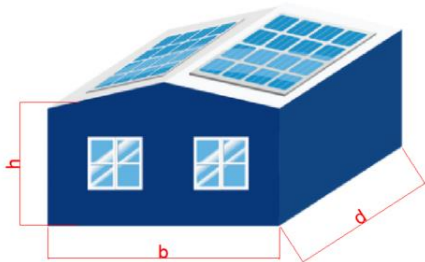
Note 31. Roof Zone definition to be calculated as per below:

Step 1. Determine building height (h), width (b) and length (d).

Step 2. Check ratio of height to length/width (h/b and h/d)

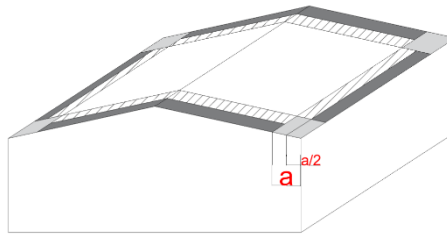
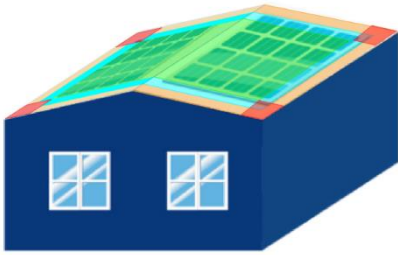
If both h/b and $h/d < 0.2$, then $a = 2h$

Step 3. If any of h/b or $h/d \geq 0.2$ then a = the lowest value between $0.2b$, $0.2d$ and

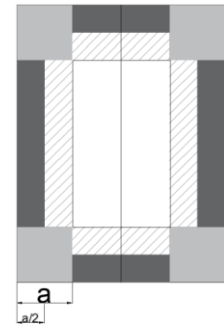


Roof zone definition

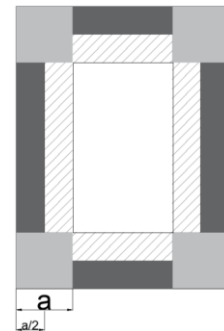
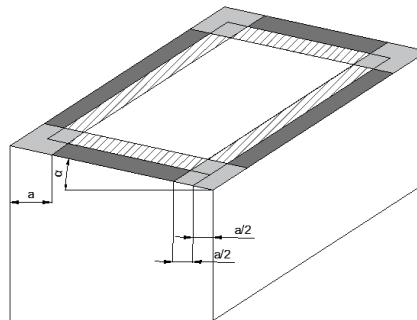
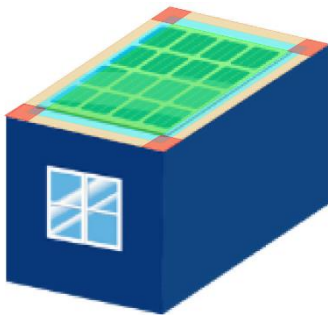
Roof Pitch $< 5^\circ$



Top view



Flat/Mono – Slope Roof $< 5^\circ$

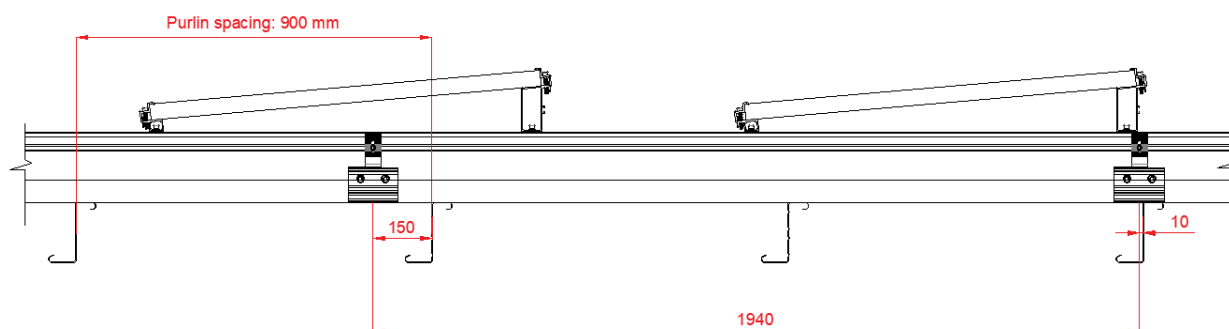


Legend:

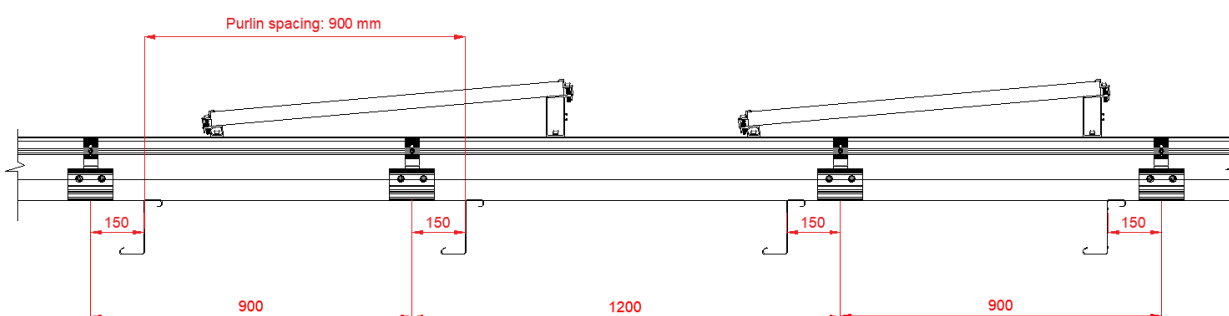
-  Internal
-  Intermediate = "a/2"
-  Edge = "a/2"
-  Corner = "a/2"

Example for Klip-lok tilted systems

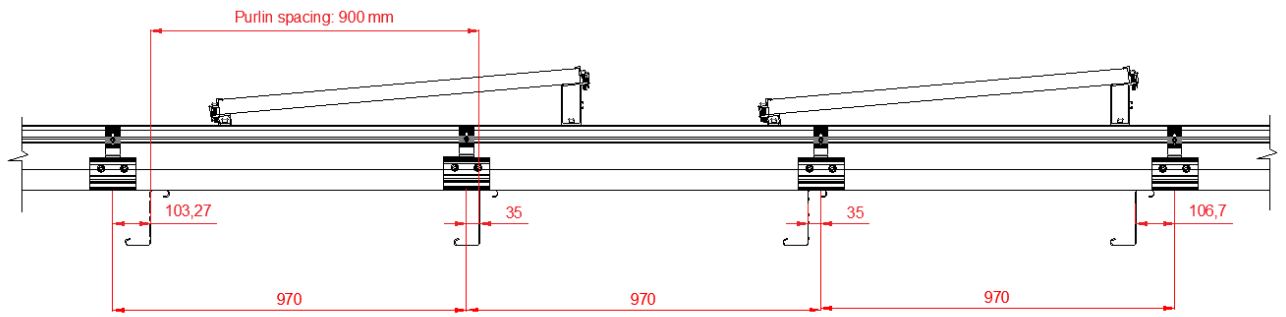
- Wind Region A
- Terrain Category: 2.5
- Building height: 5 m
- Roof pitch: 2°
- Panel tilt: 5°
- Normal tilt (not reverse tilt)
- Rail orientation: perpendicular to purlins
- Roof Sheet: Lysaght Klip-lok 406
- Purlin spacing: 900 mm
- Panel dimension: 2 m x 1 m
- Exclusions as per **Note 16** for Klip-lok 406
- Interface spacing as per below:
 - **Internal: 1940 mm**
 - Installation feasible on top of the purlin, every second purlin at 1800 mm or;
 - Installation at 1940 mm (maximum) with a purlin offset no more than 150 mm on each side, if feasible. Reference picture as per below.



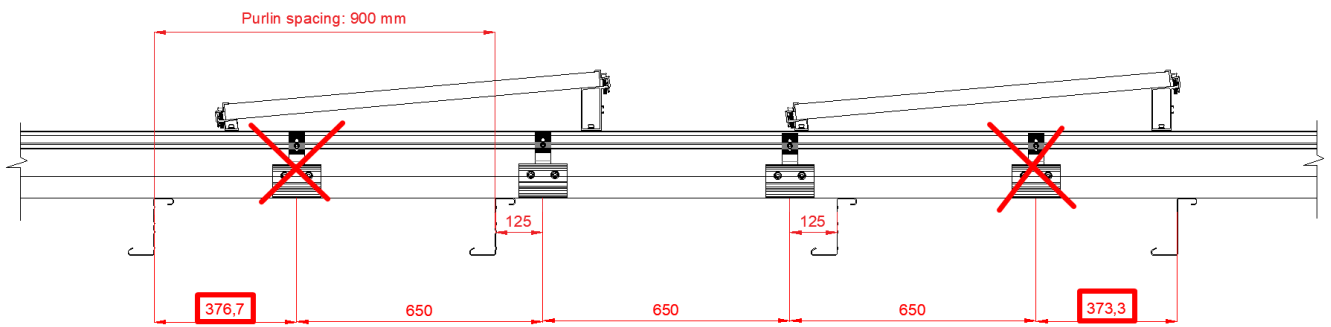
- **Intermediate: 1290 mm**
 - Installation feasible on top of each purlin at 900 mm or;
 - Installation at 1200 mm (maximum) with a purlin offset no more than 150 mm on each side, if feasible. Reference picture as per below.



- **Edge: 970 mm**
 - Installation feasible on top of each purlin at 900 mm or;
 - Installation at 970 mm (maximum) with a purlin offset no more than 150 mm on each side, if feasible. Reference picture as per below.



- **Corner: 650 mm** - Installation not compliant with this generic certificate since the bracket offset exceeds 150 mm.





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