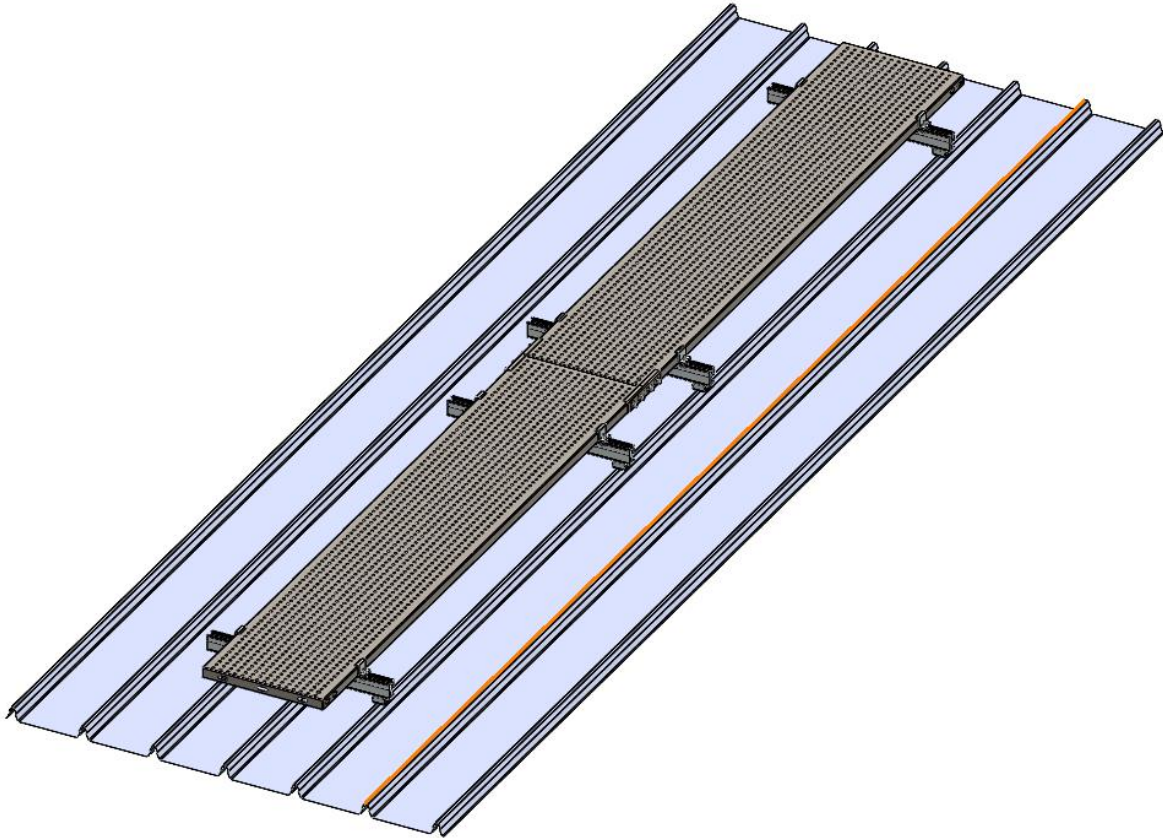


Walkway Installation Guide V1.0



1. Introduction

Roof walkways are designed to assist in ongoing maintenance, and also to protect roofs during walking. Our Walkway is compatible with all our products: ECO Rail, B50 Rail, DT Rail, L-feet, etc. For increased versatility, we offer multiple choice of length, width. The product can be applied to go alongside any roofing installation, for example solar or HVAC systems.

Please review this manual thoroughly before installing RUNNUR Walkway. This manual provides:

1) Planning and installation instructions.

The RUNNUR Walkway parts, when installed in accordance with this guide, will be structurally sound. 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 via email on sales@clenergy.com, or contacting your local distributor.

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 Walkway and other products are appropriate for the particular installation and the installation environment;
- Using only RUNNUR and PV-ezRack parts and installer-supplied parts as specified by Clenergy project plan (substitution of parts may void the warranty);
- Recycling: Recycle according to the local relative statute;
- Removal: Reverse installation process;
- Ensuring that screws to fix interfaces have adequate pull-out strength and shear capacities as installed;
- Maintaining the waterproof integrity of the roof, including selection of appropriate flashing;
- Verifying the compatibility of the installation considering preventing electrochemical corrosion between dissimilar metals. This may occur between structures and the building and also between structures and fasteners.
- Verifying atmospheric corrosivity zone of installation site by referring to ISO 9223 or consulting local construction business to determine appropriate products and installations.

Contents

Introduction	01
Tools & Component	02
System Overview	03
Planning	04
Installation Instruction	05

2. Tools and Components

2.1 Tools

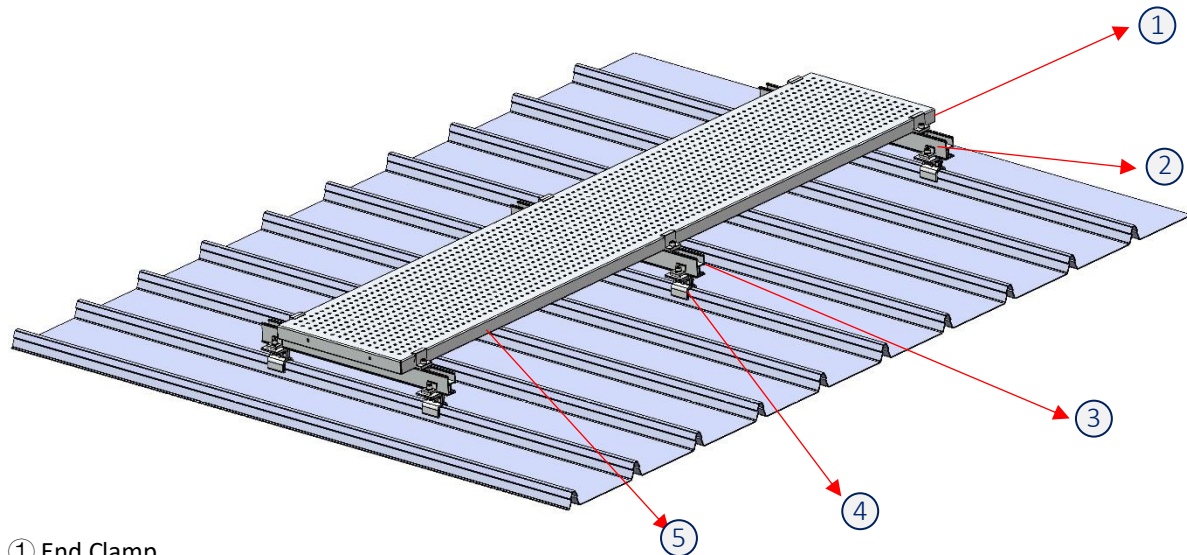
			
Screw Driver (for M8 Hexagon Socket Screw)	Allen Key	Torque Spanner	String
			
Spanner	Tape	Marker Pen	

2.2 Components

			
ER-EC-ST End Clamp	ER-R-B50 B50 Rail	CR-WX/M Walkway	CR-SP-WX35M Splice for Walkway
			
ER-I-13-TH Klip-lok Interface for Hidden 26	ER-I-16-TH Klip lok interface for Standing seam 22	ER-I-18-TH Interface for Standing Seam 20	ER-I-20A-TH Klip-lok interface for Angularity 18A
			
ER-I-31/45/M8 Klip-lok Interface 400-700HS	ER-I-32/45/M8 Klip-lok Interface 406 with U-opening	I-05-8/28/TH Tin Interface with M8x28-Bolt	I-05/6.3/85/CS Tin Interface
			
I-05A-6.3/85/CS Tin Interface A	ER-RC-AE/01 Rail Clamp for Aeri Rail without Bolt		

3. System Overview

3.1 Overview of RUNNUR Walkway



- ① End Clamp
- ② Rail Clamp
- ③ B50-rail
- ④ Interface
- ⑤ Walkway

3.2 Precautions during Stainless Steel Fastener Installation

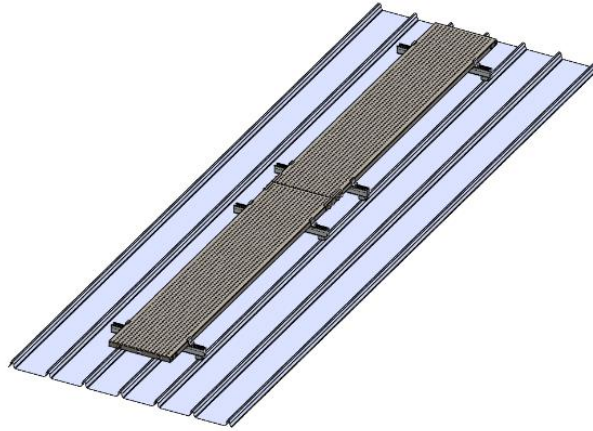
Improper operation may lead to deadlock of Nuts and Bolts. The steps below should be applied to stainless steel nut and bolt assembly to reduce this risk.

3.2.1 General installation instructions:

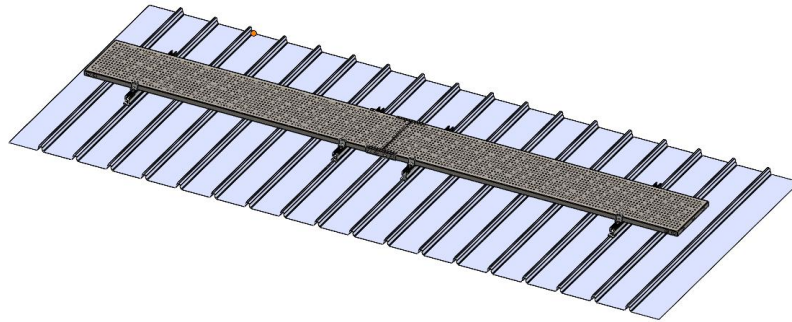
- (1) Apply force to fasteners in the direction of thread
- (2) Apply force uniformly, to maintain the required torque
- (3) Professional tools and tool belts are recommended
- (4) In some cases, fasteners could be seized over time. As an option, if want to avoid galling or seizing of thread, apply lubricant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

4. Planning

Walkway can be installed in landscape and portrait by switch the orientation of Tin Interface. The installation methods are the same. This manual take portrait as an example.



Walkway installed in portrait



Walkway installed in landscape

5. Installation Instructions

5.1 Interface Installation

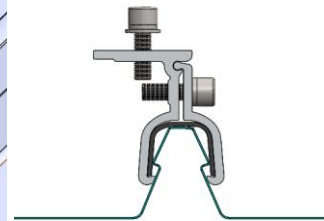
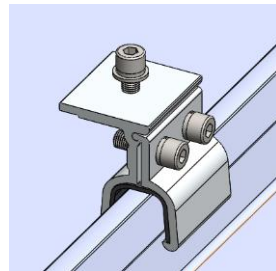
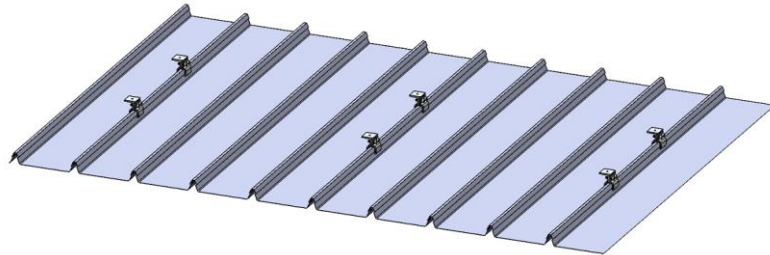
According to the installation plan and Interface load vs. span data on the right, mark fixing positions of Interfaces with Marker Pen and String.

5.1.1 Klip-lok Interface installation

Place Klip-lok Interface on the marked position, as shown figures on the right.

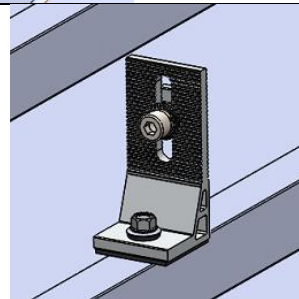
Load vs. span data:

Span (mm)	1000	1200	1350	1500	1800
Distributed Load (N/mm)	6.74	3.90	2.74	2.00	1.15
Deflection (mm)	5	6	6.75	7.5	9
Load (Kg)	429.54	298.29	235.69	190.91	132.57



5.1.2 Tin Interface installation

Place Tin Interface on top of tin roof, then adjust its direction, as shown in figures on the right.

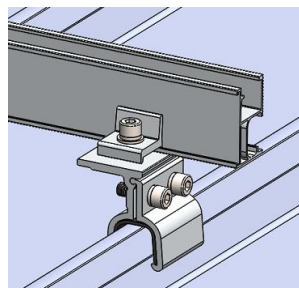


5.2 Rail Installation

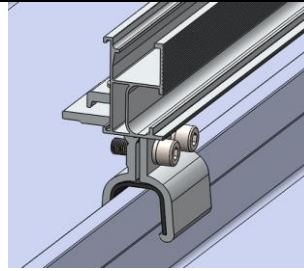
5.2.1 Fix the Rails on to Interfaces as shown on the right.

Note: Two rails are required per walkway when installed.

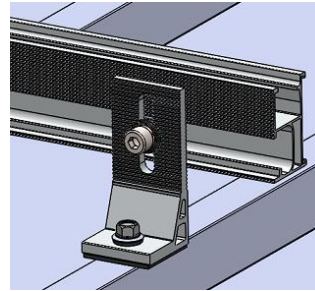
Please use a long enough rail to finish the installation. Rail splice is not recommended in Walkway's installation.



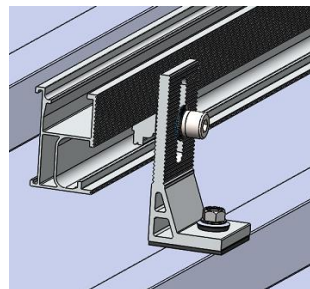
Non-Penetrative: Rails running perpendicular to ribs



Non-Penetrative: Rails running parallel to ribs



Penetrative: Rails running perpendicular to ribs

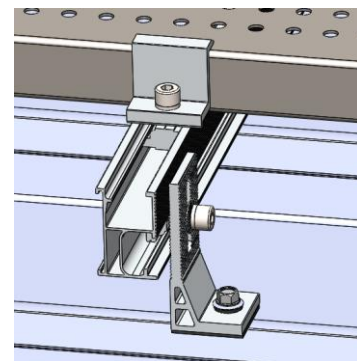
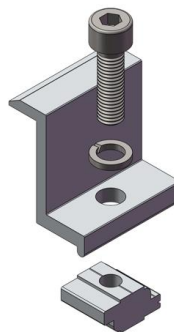


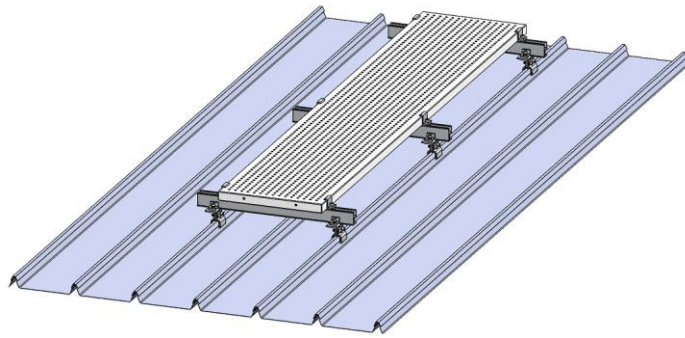
Penetrative: Rails running parallel to ribs

5.3 Walkway Installation

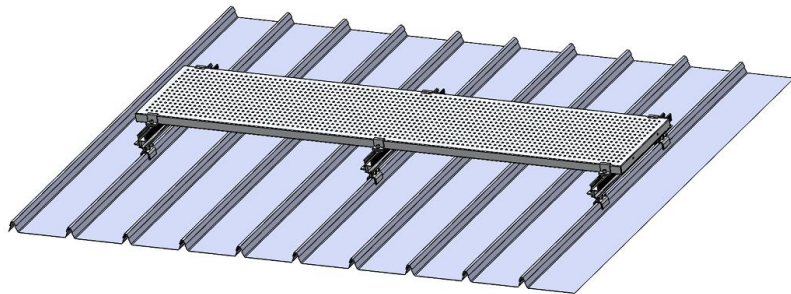
Place the first Walkway on the Rail according to your plan, and fix it in place using the End Clamps. Then fasten lightly as shown in Figure on the right.

Note: Walkway can running both perpendicular and parallel to roof ribs.





Walkway running parallel to ribs



Walkway running perpendicular to ribs

5.4 Walkway Splice Installation

Align two Walkways, fix the splice on two sides of Walkways. Align four vertical slot holes of the Splice with the transverse slot holes of the Walkways, then fasten with four sets of Cup head square neck bolts M10.

Recommended torque of M10*18 is 35~40N·m.

