



## **Technical Specification for Roof Integrated System - RIS<sup>®</sup>**

**PV Systems**

**Document Number: 001001**

# PV SYSTEMS

## Roof Integration System - RIS<sup>®</sup>

Reference: 001001

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The PV SYSTEMS roof integrated system RIS<sup>®</sup> is suitable for small size to large-scale systems. The system has been successfully deployed in many installations in Europe. PV Systems provide on-site training to install the RIS<sup>®</sup>.

### **1) APPROVAL SPECIFICATION:**

PV SYSTEMS RIS<sup>®</sup> has been tested in compliance with European and International standards, including draft Dutch Building Standard and EU 'prescript' pre-standards.

### **2) PRODUCT FEATURES:**

- 5-year track record.
- Can incorporate any make and size of laminate.
- Supplied in complete kits, sub assembled and complete assembly.
- Built-in natural ventilation system.
- Manufactured of lightweight, anodised aluminium grade.
- Maximum span of cross rails 1.3m.
- Custom engineering to meet specific designs.
- Internal water drainage system.
- Easy to assemble and install.
- Can be fastened to all standard roof sub-structures.
- System assembly documentation & instruction manuals supplied.

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### 3) COMPONENT LIST:

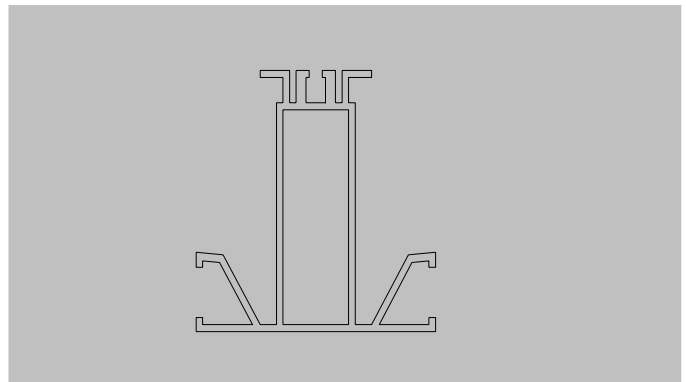
The system consists of the following components:

Description	Part No.
Main Rail	180001
Cross Rail	180002
Cap Strip	180003
Rivet	60201
Gasket	190001
Cable Cover Strip	30001
Stainless Steel Clamps	60001

### Main Rail:

#### Technical Data:

- Alloy Specification: 6063
- Temper: T6
- Theoretical weight: 1.896kg/m
- External Perimeter: 491mm
- Internal Perimeter: 161mm
- Ix: 19.36cm
- Iy: 20.65cm



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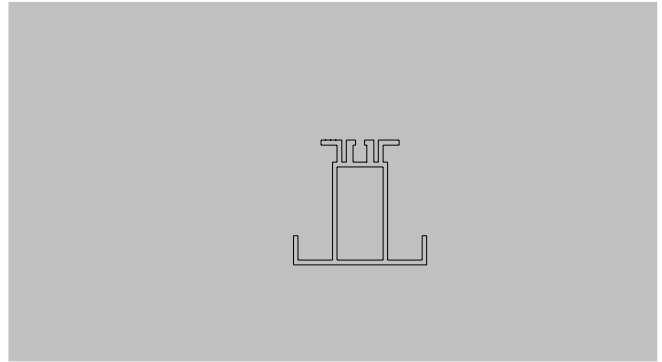
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### Cross Rail:

#### Technical Data:

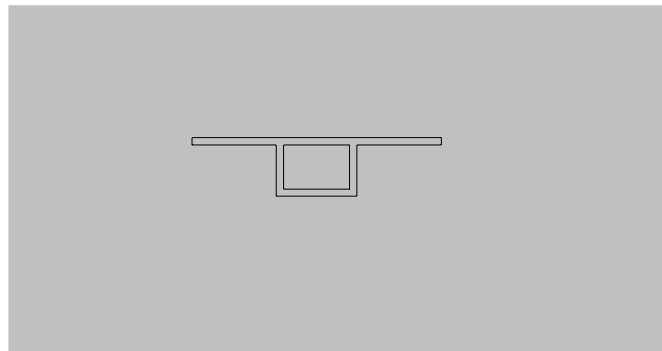
- Alloy Specification: 6063
- Temper: T6
- Theoretical weight: 1.324kg/m
- External Perimeter: 330mmmm
- Internal Perimeter: 117mm
- lx: 17.84cm
- ly: 9.42cm



### Cap Strip:

#### Technical Data:

- Alloy Specification: 6063
- Temper: T6
- Theoretical weight: 0.154kg/m
- External Perimeter: 83mm
- Internal Perimeter: 31mm
- Recommended rivet spacing  
300mm



### Rivet:

Material: Aluminium  
Closed end type  
Pull out strength 600N

### Gasket:

Material: EPDM  
Maximum thickness of laminate: 6mm

### Cable Cover Strip:

Material: Semi-rigid UPVC  
Supplied in lengths of 3m

### Stainless Steel Clamps:

Material: SS321  
Fixing Hole Diameter: 6mm

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### 4) ASSEMBLY:

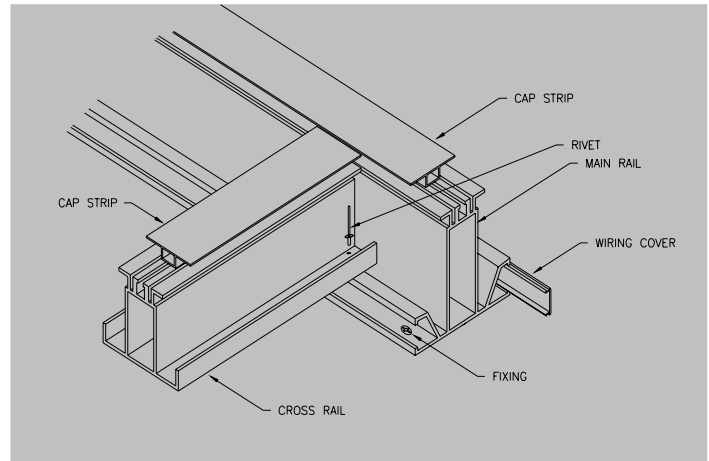
The system is easy to assemble. The system is secured by fixing the main rails to roof substructure. There are 2 recommended ways for fixture:

1. At 1m spacing fastened through flange & secured with fasteners

Or:

2. Secured using special 60001 type stainless steel clamps fastened at 600mm spacing

The system may be supplied in kit form or in various stages of factory pre-assembly to suit specific site conditions.



### 5) APPLICATIONS:

- Suitable for integration into new and old roofs.
- Can be installed on mono-pitch and double-pitch roof structures.

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### 6) EXAMPLES OF INSTALLATIONS USING RIS<sup>®</sup> SYSTEM:



*Photos 1 & 2: Oxford Eco-House Roof, UK*



*Photo 3: Roofs of Housing Scheme at Amersfoort, Holland*

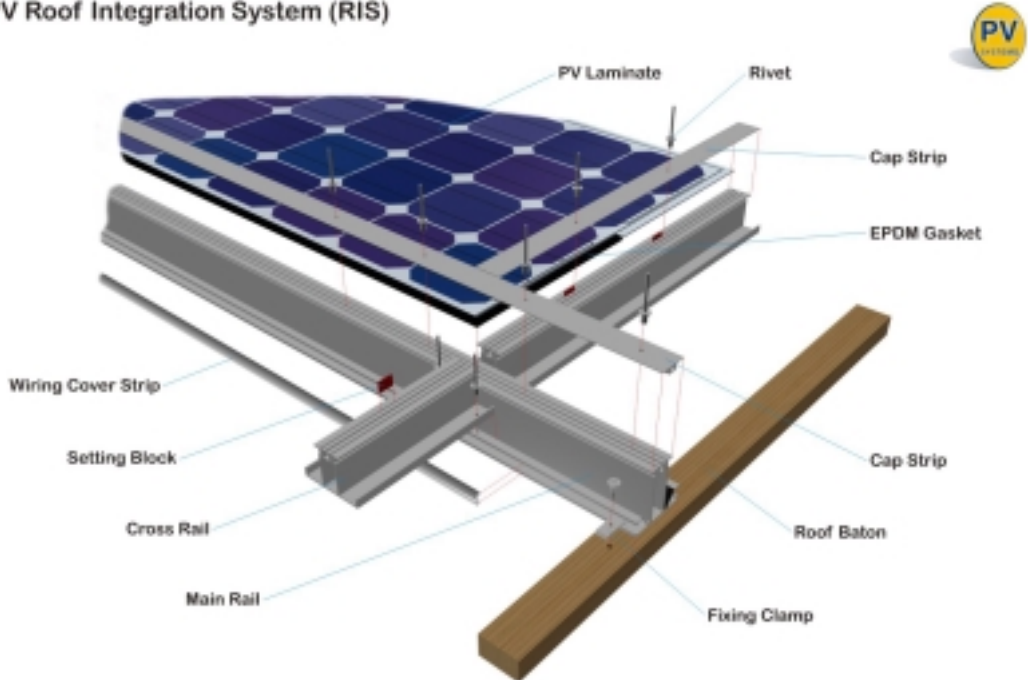
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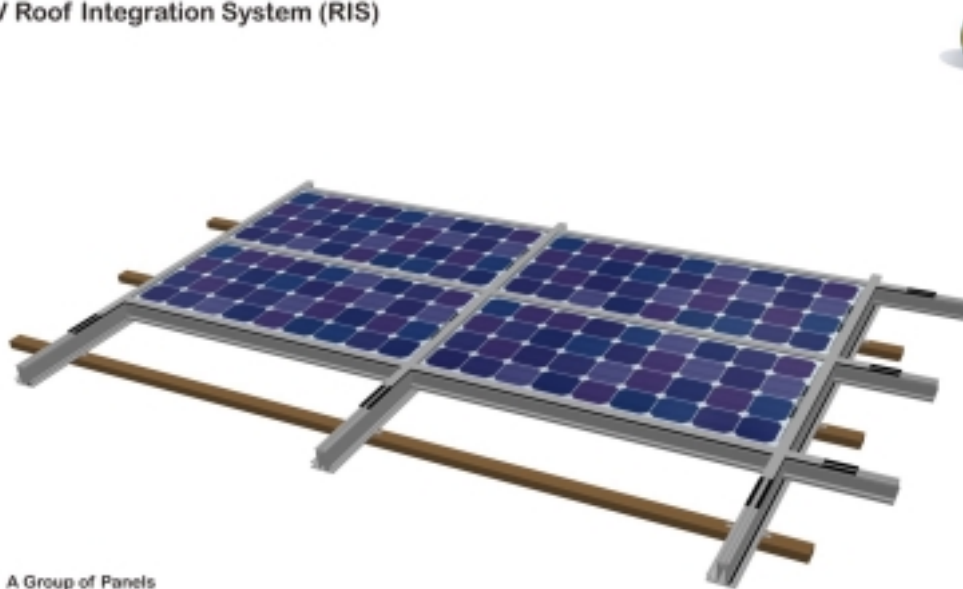
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### 7) 3-D ILLUSTRATION OF 'RIS'<sup>®</sup> MOUNTING SYSTEM:

PV Roof Integration System (RIS)



PV Roof Integration System (RIS)



A Group of Panels