



TECHNICAL SPECIFICATION

SolarFix Solar Panel Bird Exclusion System



MR – MANUFACTURER

PestFix manufactures the SolarFix Solar Panel Bird Exclusion System's components from European grade-A hot-dipped galvanised steel wire (post manufacture) or European grade A 304 stainless steel and ultra-violet stabilised Nylon 7 plastic.

SC – SYSTEM COMPONENTS & CODES

WM132 - SolarFix Clip
WM133 - SolarFix Galvanised Steel Mesh
WM134 -SolarFix Stainless Steel Mesh
NF148 - SolarFix Corner Ties
NT119 – Felco C7 Wire Cutter
Or
NT120 – PestFix Std Wire Cutter

PR – PRODUCT PRESENTATION

The SolarFix Solar Panel Bird Exclusion System by PestFix is used worldwide to deter feral pigeons (Columbia Livia)

and larger birds from roosting and nesting in the void area between PV solar panels and pitched roofs. The SolarFix system features a unique, patented SolarFix clip manufactured from ultra-violet stabilised Nylon 7 plastic and prime 25mm X 25mm galvanised steel 16swg mesh or prime stainless steel 19swg mesh. Galvanised rolls are 30m X 200mm and Stainless rolls are 30m X 250mm

NON-PENETRATING DESIGN

The advantages of the SolarFix Solar Panel Bird Exclusion System by PestFix include; its non-invasive installation method, that neither pierces the solar panel, nor the roof covering, thus preserving manufacturers' warranties and the fact that it is extremely hard to see, even close up.

REDUCED MAINTENANCE & INCREASED PERFORMANCE

By excluding unwanted birds from beneath solar panel arrays SolarFix Solar Panel Bird Exclusion System by

SolarFix Solar Panel Bird Exclusion System

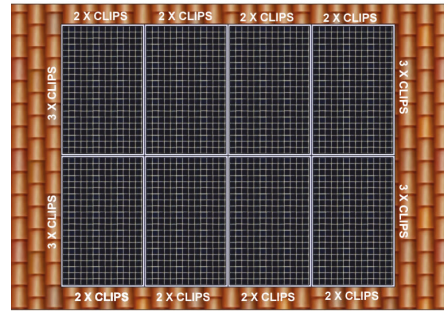
PestFix significantly reduces cleaning and maintenance requirements that would otherwise negate the economic advantages of solar energy. Pest bird infestations that remain unchecked will cause significant damage to the solar panel, roof covering and rainwater drainage system as well as drastically reducing the solar panel output as a result obliteration from pigeon faecal matter. Culminating in reduced revenues and increased MRO costs.

SAFER WORKING ENVIRONMENT

It is the responsibility of building owners / occupiers to maintain / provide a safe working environment for building users and contractors. Working amongst bird droppings whilst maintaining and overhauling PV solar panels presents significant disease transfer risks from over thirty known zoonoses (diseases that can transfer between animals and humans). By installing preventative and/ or curative measures to prevent bird infestation, such as Solar Panel Bird Exclusion Systems the building owner / occupier helps to fulfil their obligations to building users and contractors.

UA – USES & APPLICATIONS

For SolarFix Solar Panel Bird Exclusion System by PestFix to be effective the solar panel must have a minimum 20mm return lip on the underside of the frame. It is strongly advised that this is verified in advance of purchase / installation.



SolarFix Clips

Typical 8 panel layout 1.6m x 1m panels
 Demonstrates number of clips required.
 Long edge = 3 clips
 Short edge = 2 clips
 Total Requirement = 28 clips
 Use 1 clip per 450mm of panel Edge (approx.)

SolarFix Solar Panel Bird Exclusion System by PestFix is specifically designed and intended for use in excluding all species of birds from roosting and nesting beneath PV solar panel arrays on pitched domestic and commercial roofs without penetrating the solar panel frame or roof membrane in its installation.

It is the only truly infallible method of bird exclusion on solar panels that does not negate the manufacturer's warranty on the solar panels or the roof membrane or builder's guarantee.

AI – ASSEMBLY, INSTALLATION

A typical solar panel is approximately 1.6m tall and 1m wide, on a typical panel one should use 3 SolarFix clips on each long edge and 2 SolarFix clips on each short edge. See diagram.

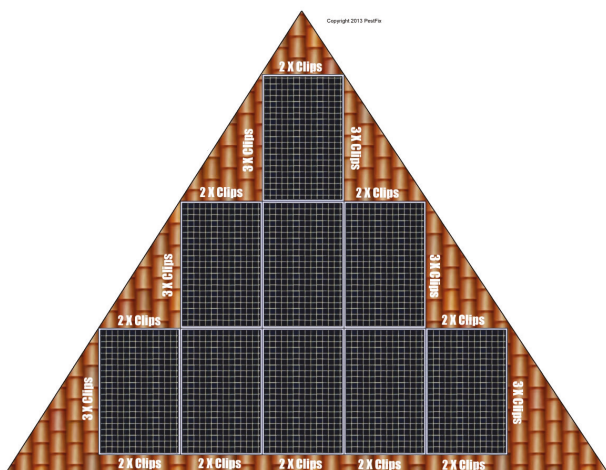
This non-penetrating system is fast and easy to install, and can be removed for service. However, replacement SolarFix Clips will be required for system re-instatement after service.

MF – MATERIALS, FINISHES

SolarFix Clip (WM132) – UV stabilised black Nylon 7 plastic with a matt finish.

SolarFix Solar Panel Mesh (WM133) - 25mm X 25mm X 200mm 16-gauge galvanised steel weldmesh 30m roll.

SolarFix Solar Panel Mesh (WM139) - 25mm X 25mm X 200mm 19-gauge 304 stainless steel weldmesh 30m roll.



SolarFix Clips

Typical 9 panel layout.
 Demonstrates number of clips required.
 Long edge = 3 clips
 Short edge = 2 clips
 Total Requirement = 36 clips
 Use 1 clip per 450mm of panel Edge (approx.)

SolarFix Solar Panel Bird Exclusion System

TS – TECHNICAL SUPPORT

PestFix has a team of BPCA & RSPH qualified Customer Support Technicians available to assist in any aspect of evaluation & product recommendation. PestFix can recommend certified installers that are local to your site if required.

Free literature, job evaluation and installation information is available to download from www.pestfix.co.uk

SPECIFICATION GUIDELINES

GENERAL

1.1 DESCRIPTION

- 1.1.1 Install SolarFix Solar Panel Bird Exclusion System by PestFix to any solar panel array on a pitched roof to either prevent or cure nesting or roosting problems.

1.2 QUALITY ASSURANCE

- 1.2.1 Obtain technical literature from manufacturer or distributor, telephone consultation and plan/ photograph evaluation.
- 1.2.2 Only employ certified installation companies in your area who are fully skilled with PestFix products, and carry the proper insurance coverage.
- 1.2.3 Only utilise labour recommended by PestFix for especially challenging applications.

1.3 SUBMITTALS

- 1.3.1 Submit manufacturer's samples, catalogue cuts, shop sketches and other descriptive material.

1.4 PRODUCT HANDLING

- 1.4.1 Protect SolarFix Solar Panel Bird Exclusion System by PestFix components from damage before, during and after installation.
- 1.4.2 If damage occurs to SolarFix Solar Panel Bird Exclusion System by PestFix components make all replacements immediately using PestFix approved spare parts.

PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- 2.1.1 PestFix, Unit 1d Littlehampton Marina, Ferry Road, West Sussex, BN17 5DS, United Kingdom

WM132 - Solar Panel Mesh Clip



Tel: 01903 538 488 Fax 01903 539 331

Email: sales@pestfix.co.uk

2.2 MODEL DESIGNATION

- 2.2.1 SolarFix Solar Panel Bird Exclusion Clip & Disc WM132
- 2.2.2 SolarFix Solar Panel Bird Exclusion Mesh Galvanised Steel WM133
- 2.2.3 SolarFix Solar Panel Bird Exclusion Mesh Galvanised Steel WM133
- 2.2.4 SolarFix Solar Panel Bird Exclusion Corner Tie NF148
- 2.2.5 PestFix Spring-Action Wire Side Cutters NT120

2.3 MOUNTING SYSTEMS

- 2.3.1 Solar Panel: by sliding SolarFix Clip over return lip on the underside of the frame
- 2.3.2 Roof covering: Kink the SolarFix wire mesh as per installation instructions prior to offering up to solar panel frame. Then slide the mesh over the protruding SolarFix Clip and lock in position using non-return disc. No mechanical fixings will be necessary
- 2.3.3 Close internal and external corners using zip ties included in kit and

SolarFix Solar Panel Bird Exclusion System

EXECUTION

3.1 EXAMINATION

- 3.1.1 Examine installation area. Notify architect of detrimental work conditions.
- 3.1.2 Ensure safe access system to work area via either a scaffold or M.E.W.P.
- 3.1.3 Do not proceed until conditions are corrected

3.2 SURFACE PREPARATION

- 3.2.1 Underside of solar panels and surrounding roof covering must be cleared of bird nests and eggs in accordance with local wildlife legislation.
- 3.2.2 Ensure area has been disinfected using a proprietary avian disinfectant such as PX Ornikill GC079 to create a safe working environment

3.3 INSTALLATION

- 3.3.1 Install SolarFix Solar Panel Bird Exclusion System by PestFix as recommended in the installation instructions, which are supplied by the manufacturer.
- 3.3.2 Place SolarFix clips every 450mm / 18 inches along outer edge of PV array. Slide the SolarFix clip onto the underside edge of the panel support bracket. Slide as far outward as possible so that the SolarFix clip is all the way on the lip of the panel.
- 3.3.3 Set the SolarFix wire mesh screen in place. Make sure the fastener rod comes through the screen at an upward angle as to keep downward pressure on the screen, pushing it towards the roof.
- 3.3.4 Slide the retaining one-way disc onto and along the shaft of the SolarFix clip assembly until snug against the mesh. Make adjustments to the screen as necessary. Tighten one-way disc to panel edge.
- 3.3.5 Include a 75mm (3inch) overlap of the SolarFix Mesh when installing the next section.
- 3.3.6 Cut-off any excess SolarFix Mesh that may have been left protruding over the top edge of the solar panel array. Trim the excess shaft from the SolarFix clip assembly flush with the exterior face of the retaining disc. Use either our budget or professional wire cutters NT119 or NT120 respectively.

3.4 INSPECTION

- 3.4.1 Visually inspect the SolarFix Solar Panel Bird Exclusion System by PestFix for any gaps greater than 25mm or for loose clips or mesh panels or other problem related to poor installation.
- 3.4.2 Ensure that cables running from solar panels have not been crushed, strained or in any way damaged during the installation
- 3.4.3 Repair as necessary immediately using only SolarFix original parts.

OM-OPERATION, MAINTENANCE

If the Solar Panel Bird Exclusion System is installed per our specifications, the product should be virtually maintenance free.

Annual visual inspection is recommended to check for any signs of damage or dilapidation. If found repair immediately with SolarFix original parts.

WM132 - SolarFix Solar Panel Mesh Clip

