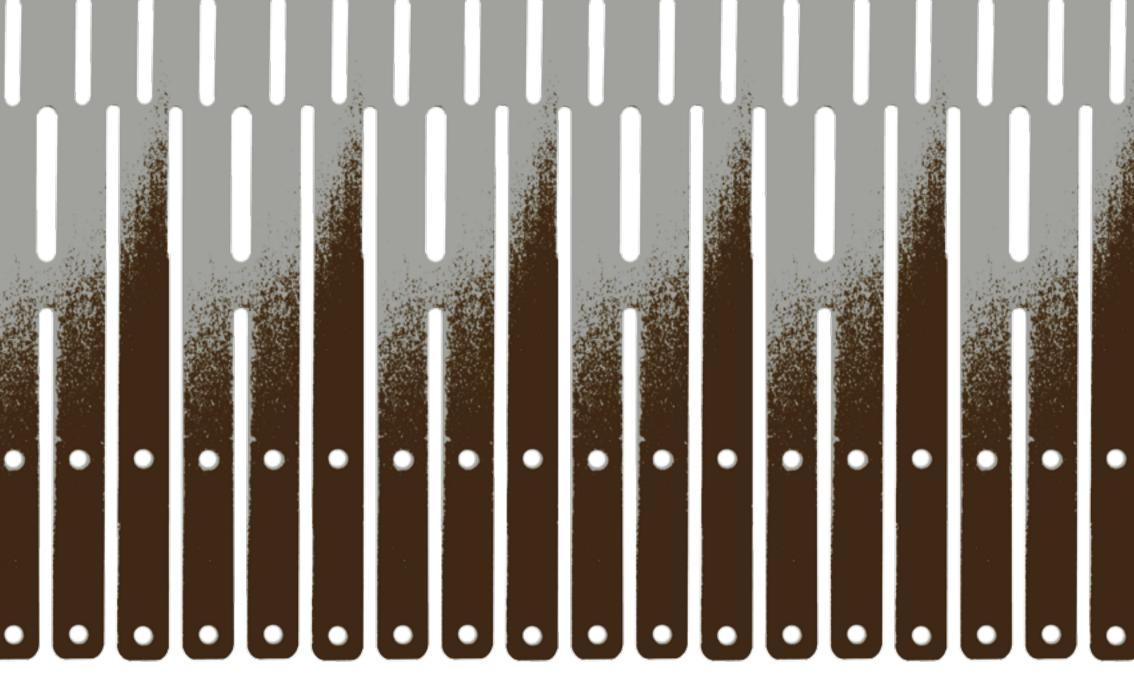


The barrier that protects solar panels



### Bring your solar panel system into the light



IIIBUDDYSUN<sup>III</sup>

#### **SOLAR PANEL SYSTEMS AND THE PIGEON PROBLEM**

The roofs of houses are often a popular gathering place for pigeons attracted by the heat that escapes through the roofing and chimneys.

When the roof is fitted with a solar panel system, the release of heat built up by the panels thanks to solar radiation is even higher.

As a result, pigeons tend to rest on the warm surface of the solar panels during the day, as well as sleeping below them at night.

Their droppings are acidic, which can cause tarnishing of the glass and a rapid decline in the performance and output of the panels.

The resulting need to use aggressive and abrasive cleaning products leads to further damage to the surface of the panels, which before long become degraded and ruined.

Moreover, the nests and droppings between the panels and the roofing will eventually be washed away by rain, building up inside the gutters and creating blockages in the drain pipes with a consequent overflow of rain water.



#### THE SYSTEM

IIIIBUDDY⊆UN<sup>™</sup> is the innovative and protective Ecobirds<sup>™</sup> barrier in the fight against pigeons.

Buddysun<sup>™</sup> is an indispensable barrier specifically for the quick and complete sealing of the gap between the rooftop and any solar panels which are not seamlessly attached to it.

The space between the panels and the surface of the roof offers pigeons a cosy place to nest and sleep in, giving rise to a range of problems such as the accumulation of droppings, the presence of pigeon insect pests, pathogenic viruses, blocked gutters, etc.

Used with the specially designed product "Buddytape", a bi-adhesive tape with high levels of resistance to atmospheric conditions, fluctuations in temperature, water, snow and smog, installation of the Buddysun™ barrier does not require the panel frames to be drilled.

Once put into place and adjusted correctly, it will close off every point of entry for pigeons. It is quick and safe to install, and does not require the modification or drilling of any structural parts of the panels.



#### PRODUCT CHARACTERISTICS

The barrier is made from painted aluminium with features which allow it to be used on all types of solar panels and roofing, without affecting the performance and output of the system.

The particular slots and holes of the Buddysun<sup>™</sup> barrier are an integral and fundamental part of the product, as they allow optimal air circulation beneath the panels.

The research carried out in this regard has enabled an area equal to 25% of the total surface area to be devoted to aeration.

Attachment with the special bi-adhesive Buddytape makes the product simple and remarkably quick to install, with significant savings on manpower.

Buddysun<sup>™</sup> comes in practical strips of 1 metre (3.28 ft) in length, which are easy to adjust even without the use of special tools and are ideal for sealing gaps of up to 22 cm (8.66 in) in height.



#### **PRODUCT PROPERTIES**

#### IIIIBUDDY5UN™

Material: dark brown-painted aluminium

Thickness: 0.8 mm (0.03 in)

Length: 1 m (3.28 ft)

Surface area used for blocking per 1 m (3.28 ft) unit: 21 sq cm (3.25 sq in) Surface area used for aeration per 1 m (3.28 ft) unit: 2.5 sq cm (0.39 sq in)

Height of teeth: 18 cm (7.08 in)

No. of individual teeth: 48 per metre (48 per 3.28 ft)

Width of individual teeth: 1.6 cm (0.6 in)

Depth of upper strip: 5 mm (0.19 in)

#### **@BUDDYTAPE**

Specific aluminium-to-aluminium bi-adhesive tape, resistant to atmospheric conditions and with high tenacity levels for heavy-duty use in outdoor environments.

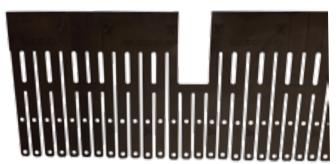
Adhesion: 40% after 2 minutes

Maximum polymerisation: 100% after 72 hours

Width: 25 mm (0.98 in)

Thickness: 1.2 mm (0.05 in)







#### **INSTALLATION**

- Carefully clean the part of the Buddysun™ barrier where the special bi-adhesive Buddytape is to be applied.
- Use solvents and degreasing products when cleaning, to ensure the elimination of any residual grease.
- Apply the bi-adhesive Buddytape using a rubber roller, ensuring it adheres evenly along the whole surface.
- Carefully clean the surface of the solar panel frame using solvents and degreasing products to ensure the elimination of any residual grease.
- Apply a strip of silicone to the inner edge of the Buddysun™ barrier before adhering it to the panel. This will prevent water from seeping in between the barrier and the Buddytape.
- Apply the barrier, aligning the upper strip of the barrier with the top edge of the structure surrounding the panel. The teeth will automatically adapt to the undulation and structure of the roof.

**WARNING!** Do not remove and reattach the barrier, as this could weaken the hold of the adhesive glue.

- Once the bi-adhesive tape sticks, apply pressure evenly along the full length for a better result.
- Adjust the teeth manually, carefully bending them so that they make the openings inaccessible to pigeons, and preventing them from exerting a spring force sufficient to undermine the effectiveness of the bi-adhesive tape which is still undergoing polymerisation.

**WARNING!** Always position the teeth so that they point outwards from the opening, never turned inwards underneath the panel.



### **BUDDYSUN VS COMPETITOR PRODUCTS**



Greater versatility with independent strips which automatically adapt to any smooth or undulated roof covering



Need for specific cuts to adapt it to the shape and uneven surface of the roof

Ideal for heights between 5 and 22 cm with no need to modify or trim the barrier

Automatic adaptation of the strips which mould to the shape of the roof tiles

The special upper lip makes the barrier rigid, allowing it to be positioned more accurately

The barrier does not require cutting, making it safer for installers and maintenance personnel

Lack of versatility for use on different heights, requiring the barrier to be cut and adapted

Need to cut the barrier to adapt it to the shape of the roof covering, with the risk of inaccuracy

Lack of horizontal rigidity leading to inaccuracy and poor bonding of the installed barrier

The need to make cuts makes the edges of the barrier sharp, increasing the risk for operators



The ECOBIRDS range is designed, industrialized and produced entirely in Italy.



# IIIBUDDY5UN<sup>™</sup>



www.buddysun.it

