



## DESIGN GUIDE AND PRODUCT INSTRUCTIONS

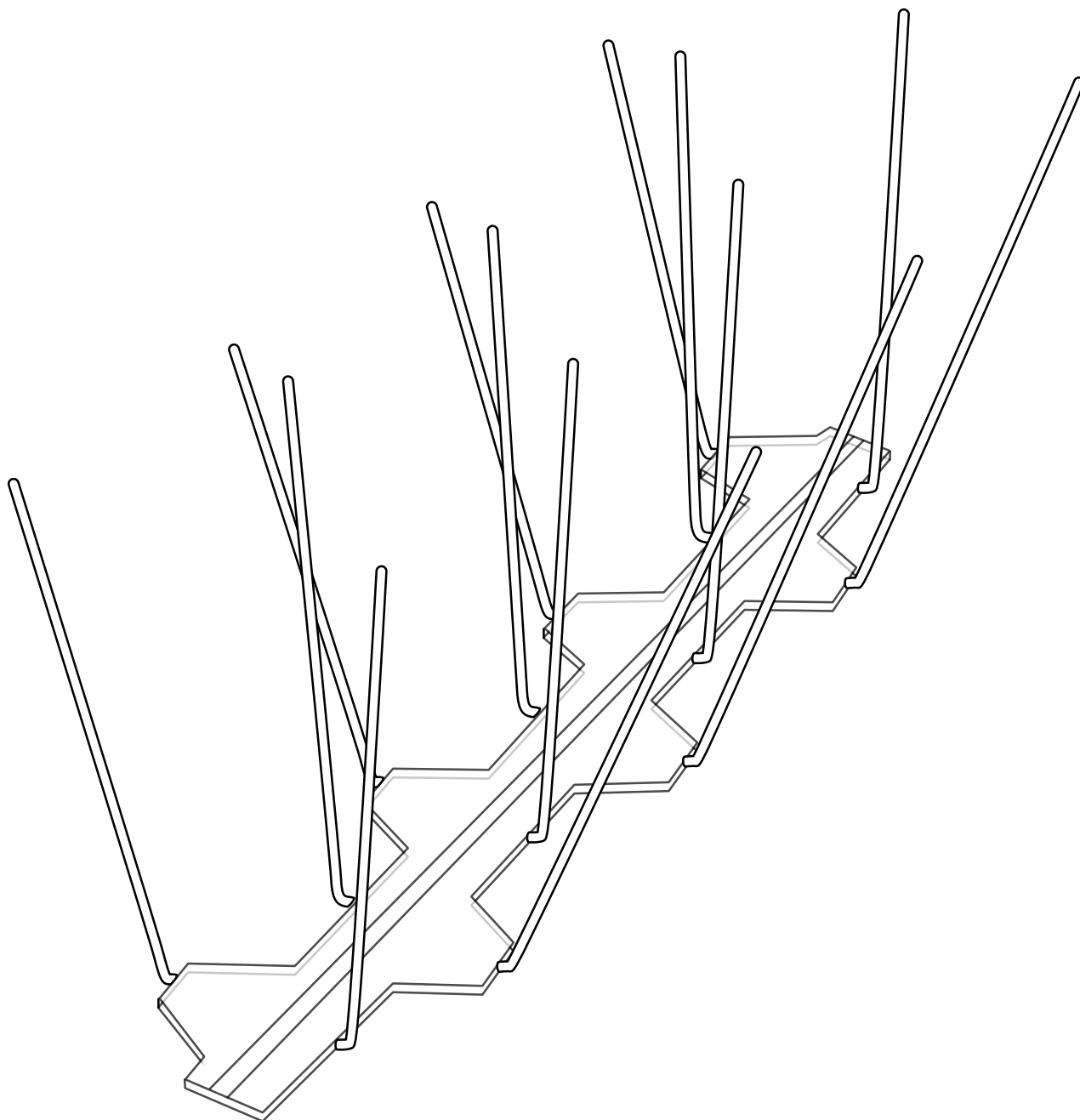
### Product code

AVI110, AVI120, AVI130, AVI140

### Description

Avipoint P14, Avipoint P20, Avipoint P32, Avipoint G20

- Instruction booklet
- Notice d'utilisation
- Bedienungsanleitungssprachen
  - Libretto istruzioni
  - Instrukcję
- Manual de instrucciones
- livreto de instruções
  - Instructieboekje
  - Instruktionsboken



## Spike Selection

For optimum deterrence in heavy pressure sites, the angles of the wires need to protrude at 45° from the ledge edge. The more vertical the wires, the easier it is for birds to push their way through.

### Avipoint™ P32 (AVI130)

For most building ledges. Suitable for daytime pigeon perching, night time roosting and some nesting areas. Might require some selective culling to ensure pigeons do not re-infest.

### Avipoint™ P20 (AVI120)

For most building ledges. Suitable for daytime pigeon perching and some night time roosting areas up to heavy pressure. Might require some selective culling to ensure pigeons do not re-infest.

### Avipoint™ P14 (AVI110)

For pipework and narrow ledges up to 115mm depth. Suitable for daytime pigeon perching places up to medium pressure

### Avipoint™ G20 (AVI140)

For most building ledges. Suitable for gull infested areas up to heavy pressure. Gulls are incredibly strong - ensure they cannot land nearby and pull it off.

Avipoint™ cannot be used against sparrows.

Three overlapping strips of Avipoint™ P32 can be used to deter starlings.

## Guide to Names

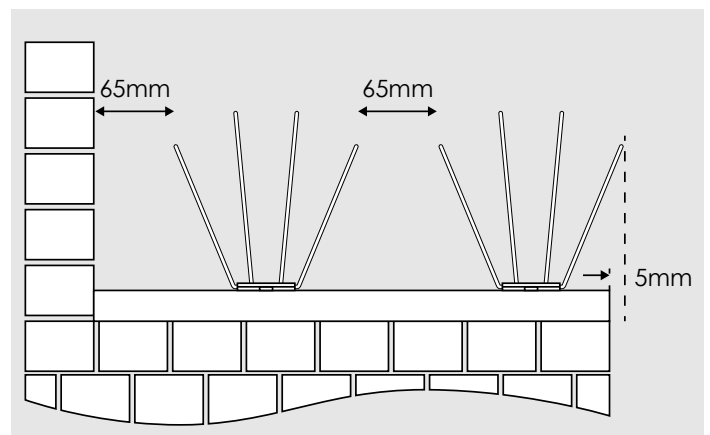
P=Pigeon

G=Gulls

14/20/32=Number of wires per 0.33m strip

## Positioning

Install the strips of spikes in line with the edge of the ledge. In this way the wires are angled outwards from the ledge and will better deter the birds as they come in to land. The tips of the wires should overhang the leading edge by 5mm. For low to medium pressure pigeon infestations leave a gap of no more than 65mm between adjacent rows or between a strip and the rear wall. For heavy pressure reduce this to 50mm. For gulls the gap can be up to 100mm.



## Edge Protection

It may only be necessary to protect the leading edge to stop the birds fouling down the front of a building. One row just overhanging the edge may be all that is required. Sometimes, if the building is low and the birds can still see a food source from behind the front row, a second row might be required to prevent the birds pushing up against the back of the front row and knocking it off.

## Adhesive Selection

In order to ensure good adhesion and to avoid damage to the Avipoint™ it is important to use quality adhesive:

- Avisil is generally the best and most cost effective solution for dry conditions
- Avifix can be used if weather conditions when installing are slightly damp; if installing gull spikes where extra strength is needed; or where faster bond strength is required e.g.
  - where birds might try and regain the proofed area before Avisil has a chance to dry
  - when installing AviClips for Windows
  - when installing onto pipes where they might otherwise fall off

Both Avisil and Avifix are neutral curing, and cure by the action of water in the air.

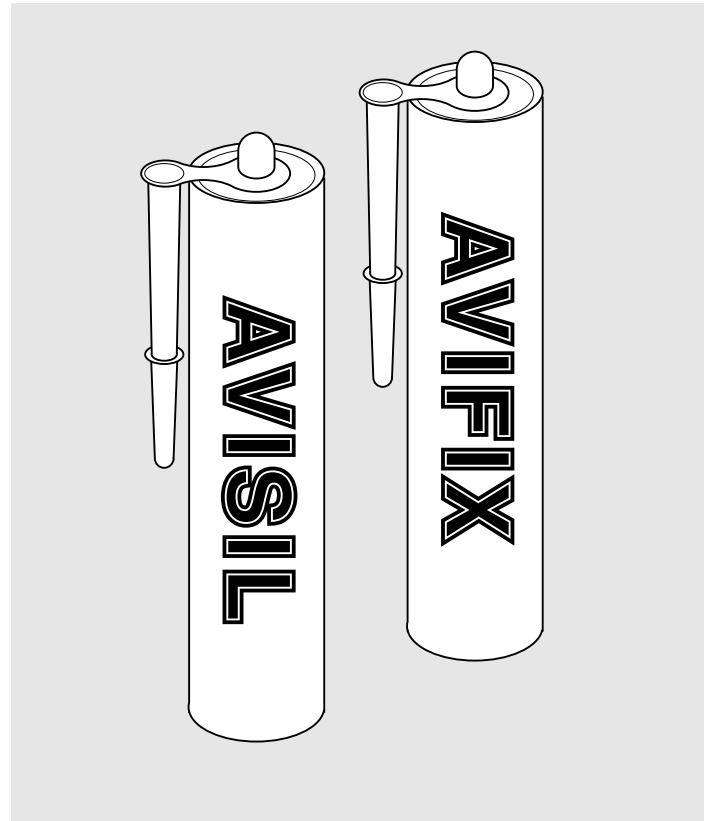
They will both adhere to brick, concrete, plaster, stone, paint, stainless steel, galvanized steel, lead, copper, brass, aluminium, plastics (excluding polyethylene and polypropylene), PVC, PPC and ceramic tiles. Avisil will also stick to glass.

Avisil temperature range when cured -60 to +180°C

Avifix temperature range when cured -40 to +90°C

### Do not use:

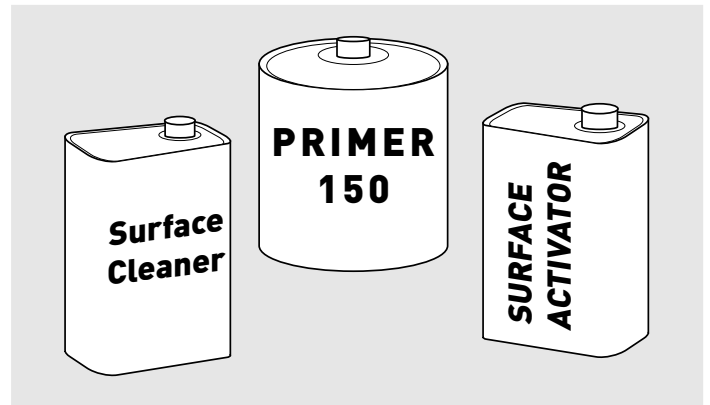
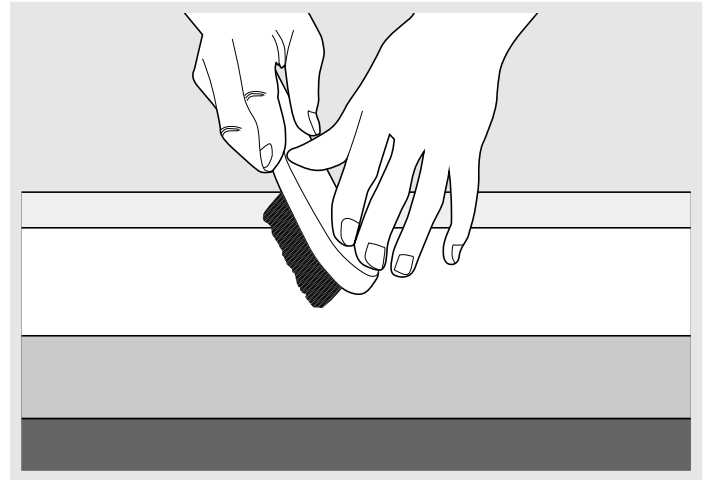
- Acid curing silicone adhesives as these can break down the plastics used in spike bases
- Sealants containing solvents as these can be oily/greasy and hinder adhesion, and over time solvent is released into the atmosphere, resulting in the bead of silicone shrinking, which may lead to adhesive failure
- Adhesives containing fillers as these will not adhere as well



## Surface Preparation

Ensure surfaces are free of dirt, dust, grease, rust, oxidation, patination, flaking paint, vegetation, droppings, etc., and are clean and dry. Remove all rust from steel components. Remove oxidation/patination from lead, copper and aluminium e.g. by abrasion.

- A scraper and wire brush are useful to help remove dirt, droppings, flaking paint, rust, vegetation
- A stiff brush is useful to remove dust
- Emery paper can be used to help remove patination
- Use Primer 150 (ADH004) on porous surfaces e.g. sandstone
- Surface Cleaner (ADH003) can be used to remove grease
- Use Surface Activator (ADH021) on plastic or metal substrates, and on spike bases, where extra bond strength is required e.g. for gulls



## Primer 150

Substrates that can absorb water, or crumble when brushed, such as brick, concrete, natural stone or plaster, must be primed using Primer 150 (ADH004).

Apply primer using a brush. The application temperature must be between +5°C and +35°C. Allow the primer to dry for at least 1 hour and at most 4 hours before applying the adhesive. If the 4 hour time limit has been exceeded re-apply the primer.

## Surface Activator

Bonding to plastic and metal substrates (e.g. fibreglass, stainless steel, galvanized/coated steel, cast iron, lead, aluminium, brass, polyester powder coat and uPVC etc.) can be improved by treating with Surface Activator (ADH021). Bonding of the adhesive to the base of the Avipoint™ can also be enhanced using Surface Activator.

Shake the tin for at least 10 seconds before each use to disperse the activator ingredient. Use a clean cloth or paper towel soaked with a little Surface Activator. Wipe the cloth or paper towel along the surface to be bonded once; turn the cloth over to expose fresh Surface Activator and repeat the procedure. Do not apply using a circular motion.

Replenish cloth or paper towel with Surface Activator regularly. Replace the cloth or paper towel when dirty. Do not allow the cloth to become dry.

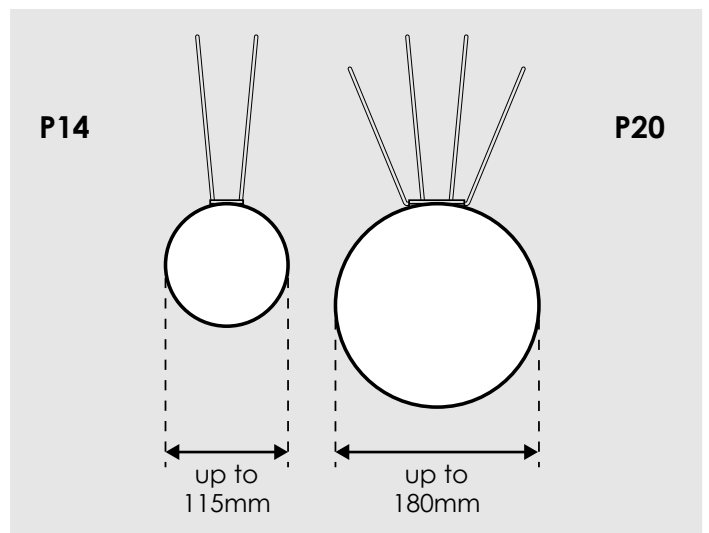
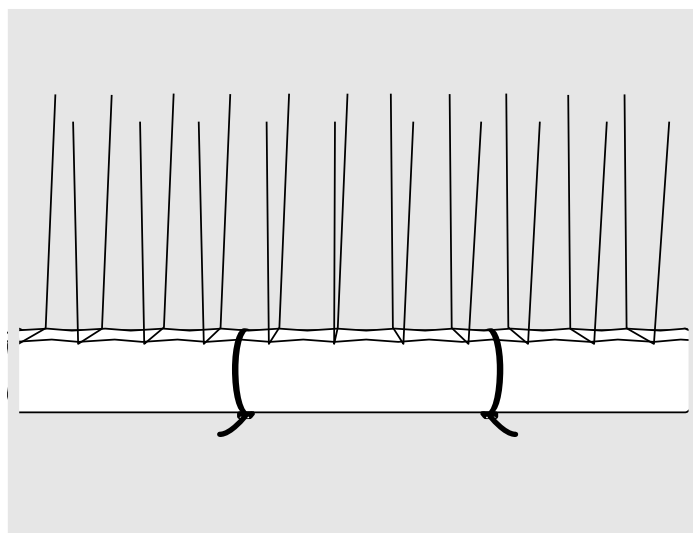
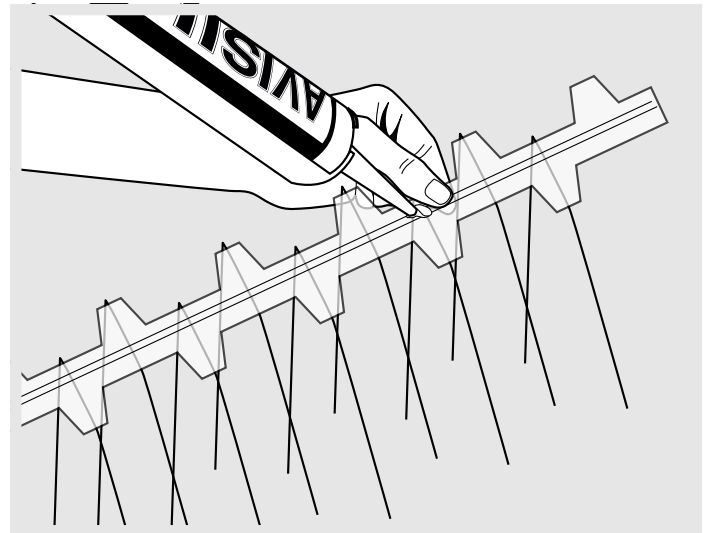
Allow the Surface Activator to evaporate (the product has evaporated when a faint white residue is visible on the surface, typically 5 – 10 minutes).

Always ensure the cap of the Surface Activator is replaced after use. If the liquid in the container becomes cloudy in appearance do not use as the product has become contaminated with moisture and will not be effective any more.

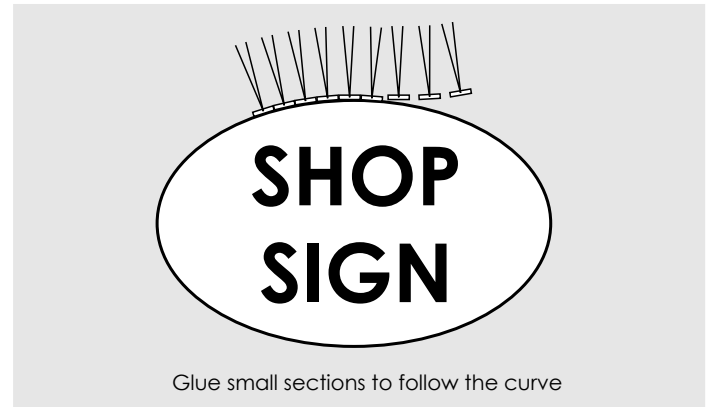
Apply the adhesive as soon as possible to reduce the risk of the surfaces becoming contaminated with moisture or dust. Bonds must be made within 8 hours of applying Surface Activator.

### Gluing

- Application temperature for adhesives +5 to 35°C.
- Apply at least 5mm bead of adhesive into the glue guide, more if the surface is very uneven. When pressing the Avipoint™ into place, aim for an adhesive depth of approximately 1mm across the surface area being bonded, with 'rivets' of adhesive forced up through the holes in the base. One tube of Avisil will glue 30 to 45 strips (10 to 15m) of Avipoint™ depending on surface profile.
- Full adhesive strength will be achieved in approximately 12-24 hours depending on the ambient temperature and relative humidity.
- When using Avifix, a heavy-duty caulking gun (ADH015) is required
- With pipes, use cable ties in addition to adhesive to prevent the spikes falling off before the glue cures. Avipoint™ P14 can be used on pipes up to 115mm diameter; Avipoint™ P20 can be used up to 180mm; use Avipoint™ P32 for larger diameters.



- Curved surfaces – split the strips across the snap lines and stick them on as separate sections. Whole strips might spring up.



Important – The adhesives, once applied, will begin to cure and form a skin within 5-10 minutes, therefore it is imperative that components to be bonded must be aligned and pressed together as soon as possible after the adhesive has been applied. Failure to observe this procedure may result in a reduction of the final bond strength.

Excess adhesive may be removed using a cloth soaked in a little white spirit.

***We recommend that preliminary adhesion tests are conducted prior to using any sealant or adhesive. It is the user's responsibility to ensure product suitability.***

***Do not smoke when using Surface Activator or Surface Cleaner.***

***Before use, read the Product Technical Data Sheets and the Material Safety Data Sheets. Use Personal Protective Equipment as required.***

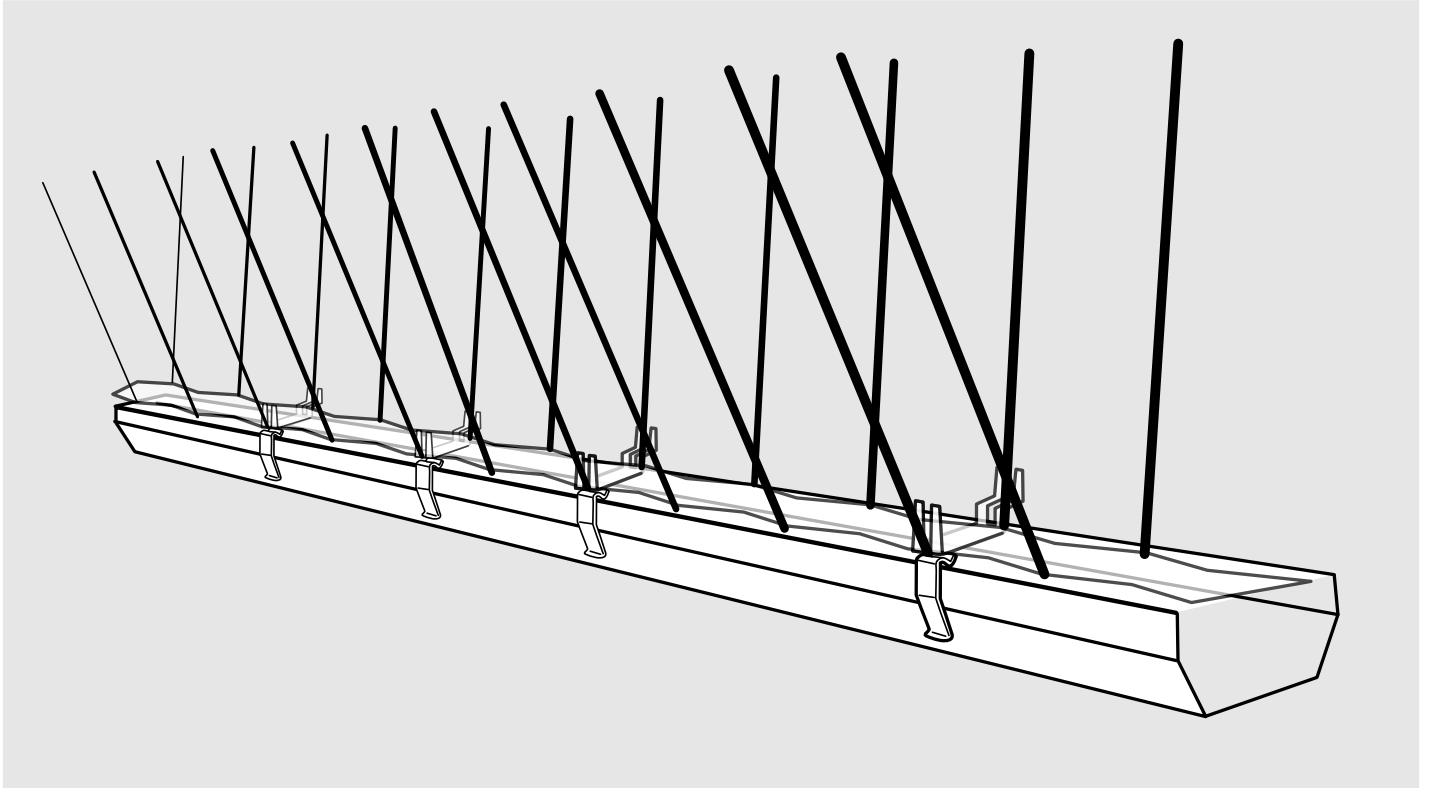
**As a unique service within the marketplace, P+L Systems helps customers design proofing installations. This advice is based purely on extensive experience in proofing against birds and not on qualified engineering design nor necessarily taking into account safety risk assessments. Please note that P+L Systems accepts no responsibility for the integrity or safety of suggested designs, and offers no guarantee on their ongoing functionality, success or safety. If you need assurance on integrity of installation design we recommend you seek the guidance of specialist materials consultants/structural engineers.**

Ensure all materials used for bird proofing are compatible with the building substrate material. Working at height can be very hazardous – ensure compliance with health and safety and work at height legislation. All installers need to be appropriately trained in H&S and suitable PPE and access equipment must be used.

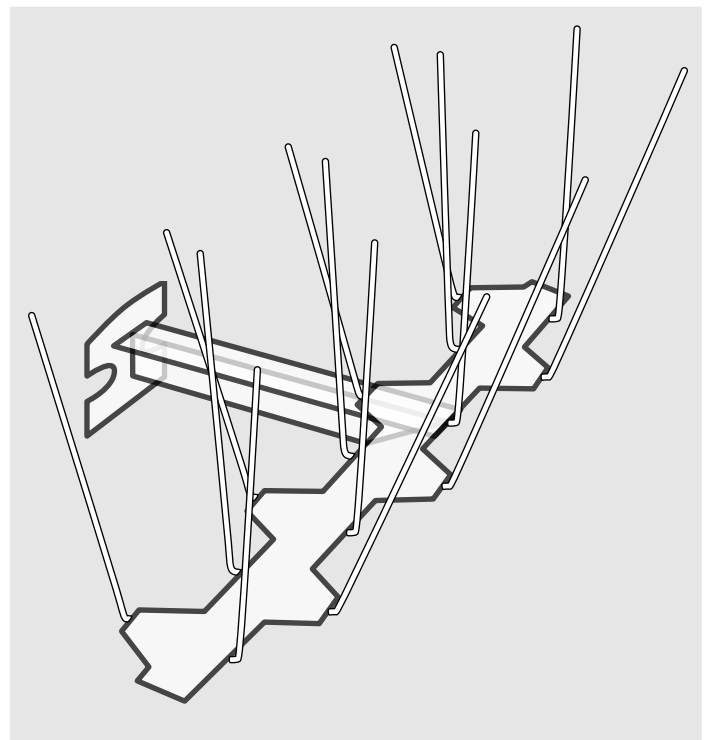
## AviClips

Two clips required per strip for all clip types.

- **Gutters** - Straight gutters and some profiled gutters take standard Gutter Clips (AVI162), roll topped gutters need Lipped Gutter Clips (AVI163). Simply clip the AviClips onto the strip and then slide onto the gutter edge – no gluing required



- **Beams** - Saves gluing preparation – place AviClip (AVI181) straight onto beam without any surface preparation. Removable for painting. Use with P20 or P32 for wide beams; break off at the snap line and use with P14 for narrow beams. The clips will fit onto beams 10mm to 35mm thick.
- **Windows** - For where spikes fixed to the sill would prevent the window from opening. AviClips for Windows (AVI171) can be stuck or screwed onto window frames. If stuck onto either wood or uPVC windows, use Surface Activator to prime both the substrate and the base of the clip to increase sufficiently the bonding power to support the weight of the spikes. Glue in place using Avifix. Use the techniques for applying Surface Activator and gluing described above for Avipoint™.



# NETWORK



## DESIGN GUIDE AND PRODUCT INSTRUCTIONS

P+L Systems' technical support is based on our extensive experience in proofing installations against pest birds, not on engineering expertise. Therefore, it is not possible for us to offer a fully qualified engineering recommendation. If you need assurance on integrity of installation design we recommend you seek the guidance of specialist materials consultants/structural engineers.

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