NETWORK

DESIGN AND INSTALLATION GUIDE
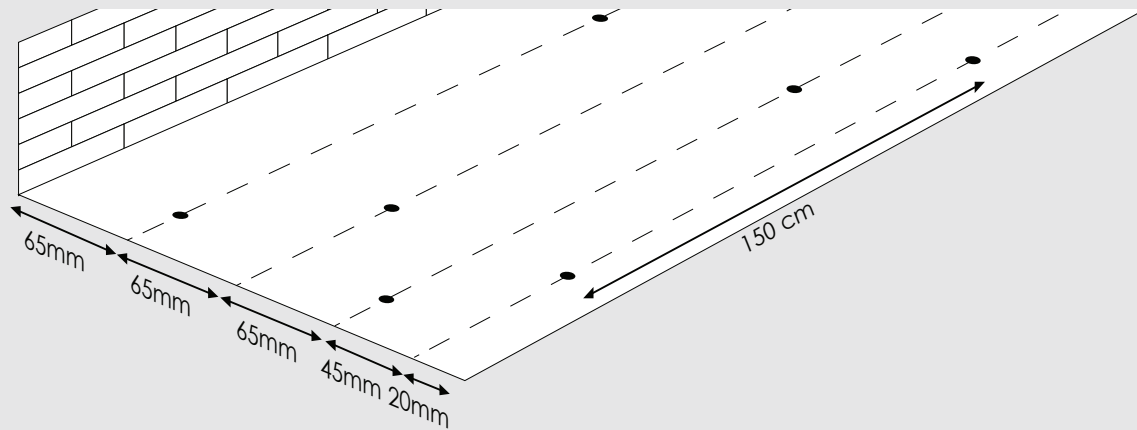
Description

Birdwire System
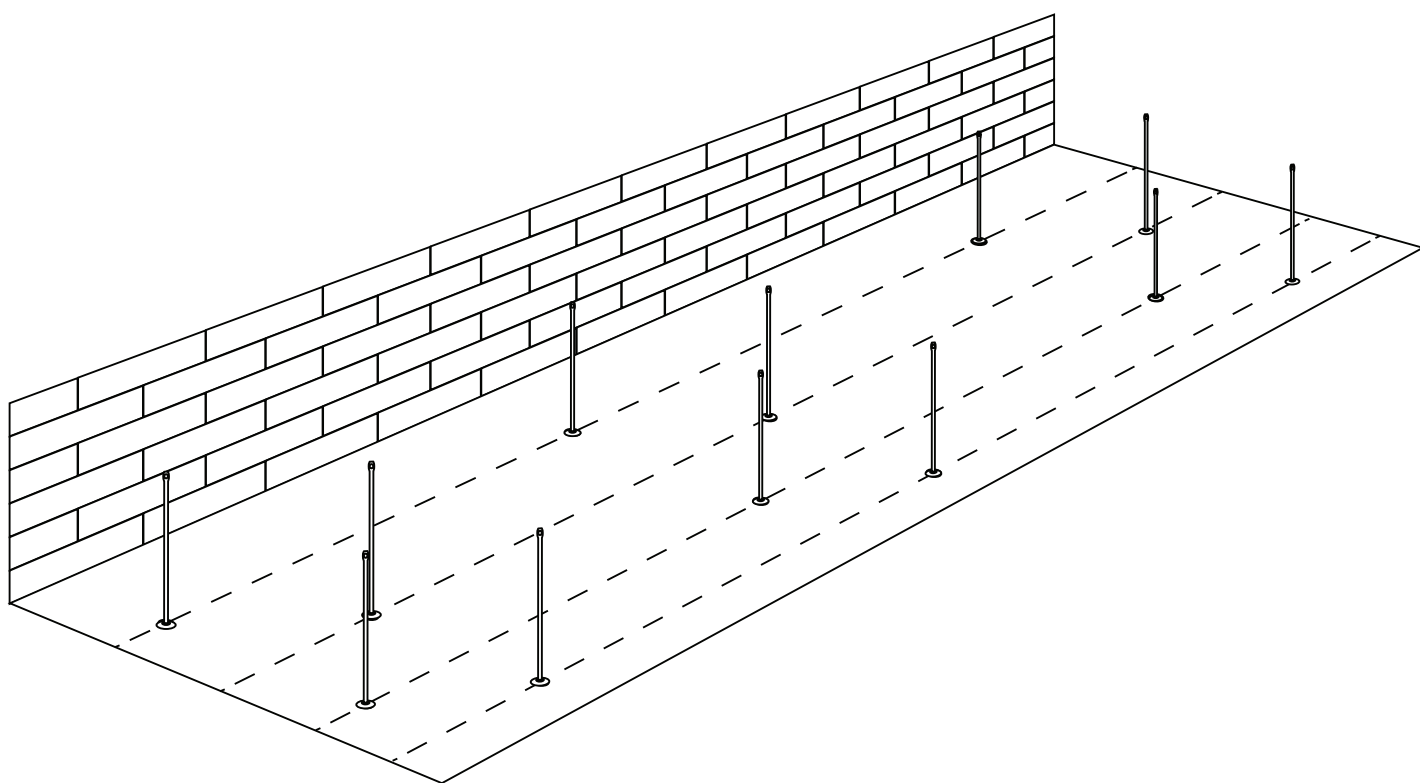
## Birdwire on masonry ledges

65mm

65mm

65mm

45mm 20mm

150 cm

Firstly, determine where the posts will need to be installed:

- The 1st row of holes needs to be 20mm in from the edge

- The 2nd row of holes needs to be 45mm back from the first row in a medium pressure infestation, 55mm back in a light pressure infestation

- Subsequent rows are then spaced 65mm apart in medium pressure infestations and 75mm apart in light pressure infestations

- The holes should be a maximum of 1.5m apart along rows, though they can be less when going around curves

- Stagger the posts from front to back – this helps prevent pigeons landing on neighbouring springs and dropping down between the wires
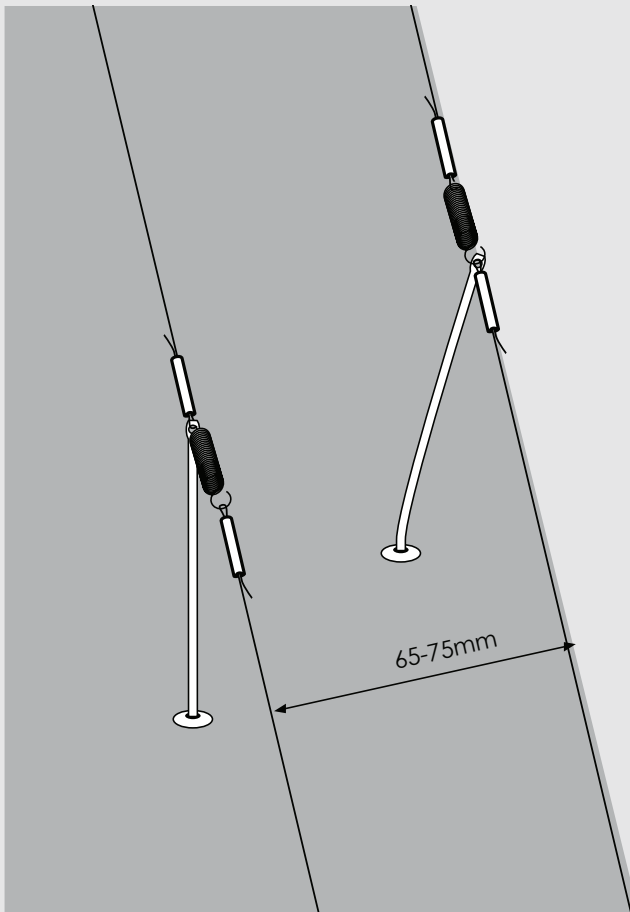
When installing multiple rows of birdwire, locate the springs on alternating ends of the wire to help prevent pigeons landing with feet on neighbouring springs
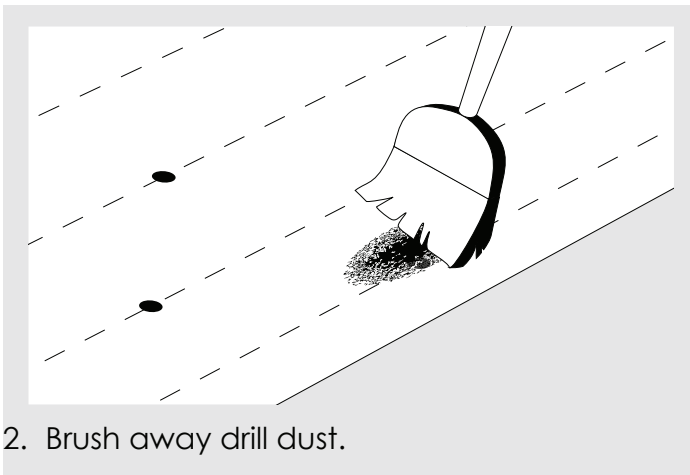
Bend the leading edge posts out so that the wire sits directly above the edge of the ledge, and the gap between the first and second parallel rows is 65-75mm.
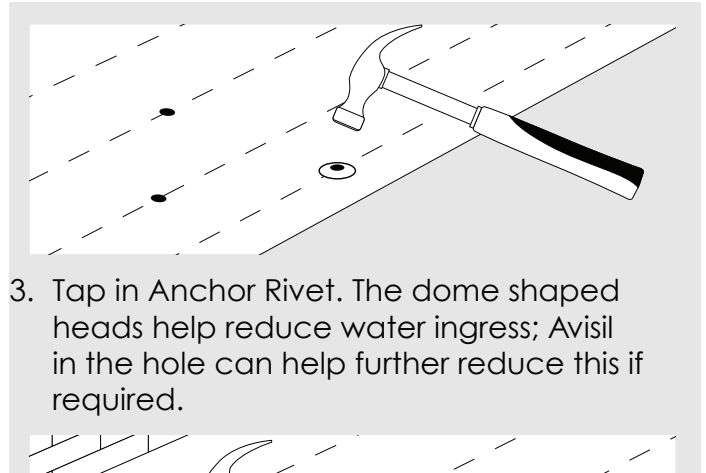
65-75mm
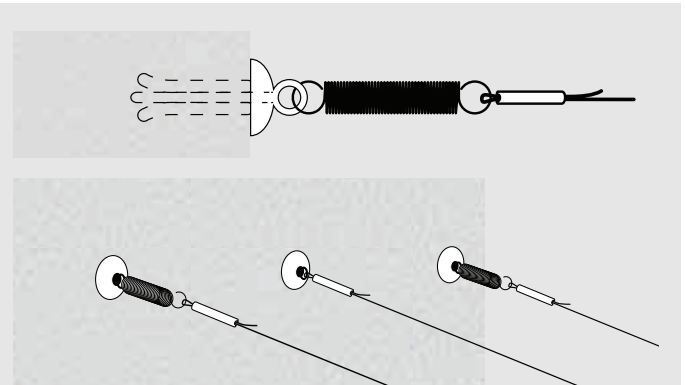
Where there is a wall at the end of a run use a horizontal hole with anchor rivet and split pin instead of a vertical post.
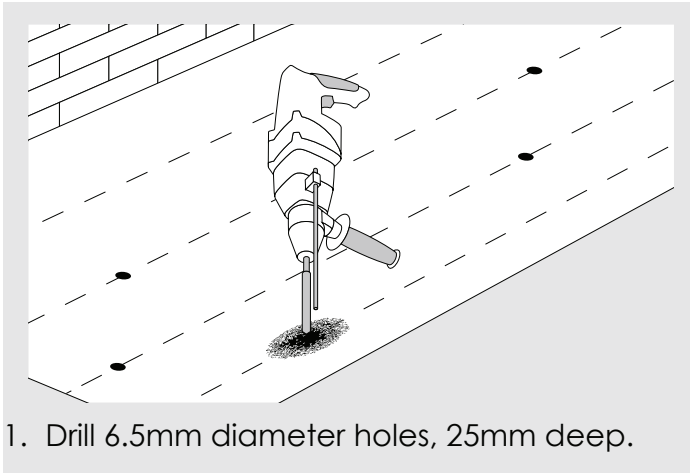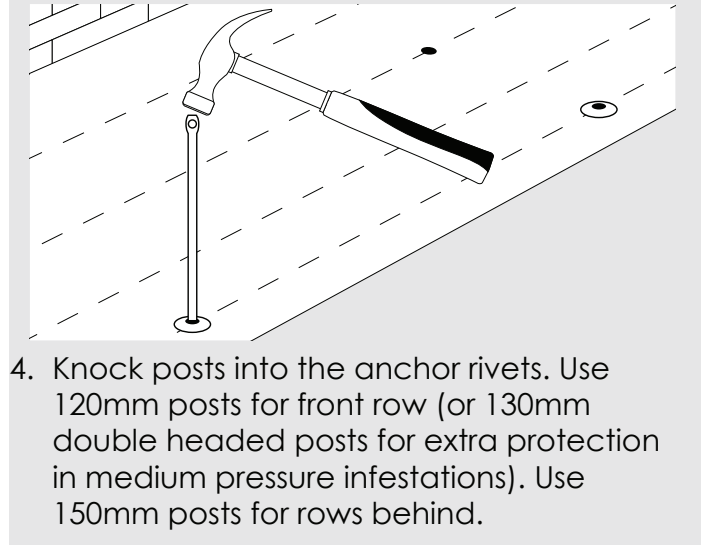
1. Drill 6.5mm diameter holes, 25mm deep.

2. Brush away drill dust.

3. Tap in Anchor Rivet. The dome shaped heads help reduce water ingress; Avisil in the hole can help further reduce this if required.

4. Knock posts into the anchor rivets. Use 120mm posts for front row (or 130mm double headed posts for extra protection in medium pressure infestations). Use 150mm posts for rows behind.
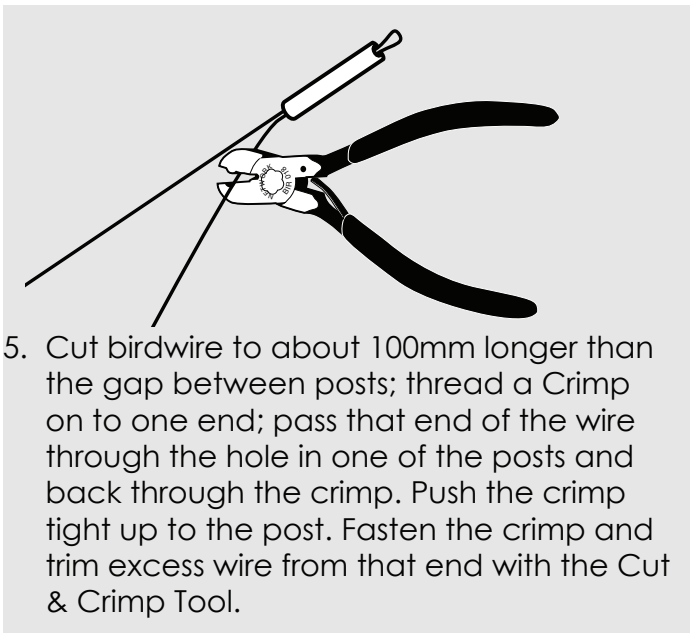
5. Cut birdwire to about 100mm longer than the gap between posts; thread a Crimp on to one end; pass that end of the wire through the hole in one of the posts and back through the crimp. Push the crimp tight up to the post. Fasten the crimp and trim excess wire from that end with the Cut & Crimp Tool.
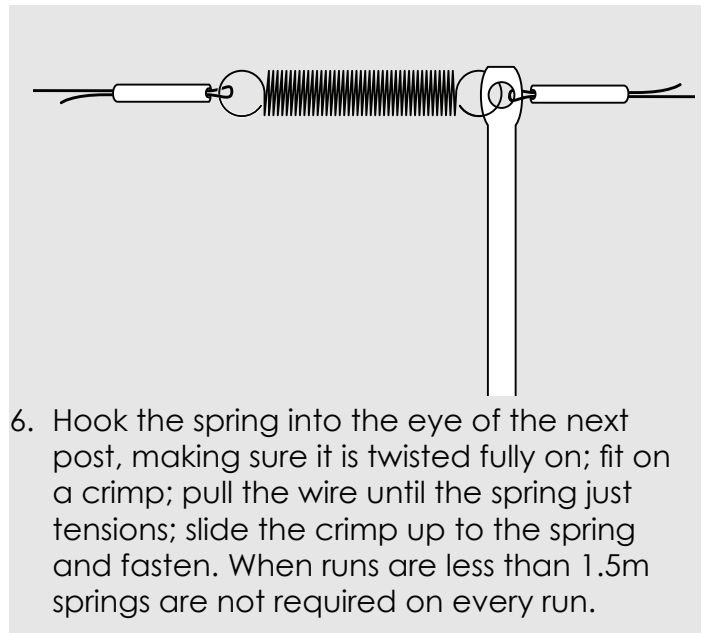
6. Hook the spring into the eye of the next post, making sure it is twisted fully on; fit on a crimp; pull the wire until the spring just tensions; slide the crimp up to the spring and fasten. When runs are less than 1.5m springs are not required on every run.

Gull Wire

Installation is similar to that for pigeons, but uses larger, heavy-duty components.

For Black Headed Gulls on ledges use 180mm x 4mm posts (with the same 25mm anchor rivets), ideally 2m apart and 90mm between rows. Use 0.96 mm diameter wire and 1mm copper ferrules.

For Herring and Lesser Black Backed Gulls – Larger 175mm X 5mm posts are available on brackets for ridges and rails or as made-to-measure brackets for parapets. These should ideally be spaced 3m apart, and should be used with the 0.96mm wire and 1mm copper ferrules.

Using Birdwire Stick-on Posts

Substrates
Stick-on posts can be used for pigeon birdwire in some situations where the substrate cannot be drilled e.g metal flashing.

Possible substrates include: Glass reinforced concrete (GRC), semi-dry cast concrete, wet cast concrete, brick, natural stone, glass reinforced plastic (GRP), stainless steel, galvanized/coated steel, aluminium, brass, lead, copper, plastics, polyester powder coat, wood, HPL panels.

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

Porous Substrates
Substrates that can absorb water, or crumble when brushed, such as brick, concrete, natural stone or plaster, must be primed using Primer 150 (ADH004). Use masking tape to protect surrounding surfaces that do not require priming and leave the tape in situ until after the sealant and adhesive have been applied and tooled.

Apply primer using a brush to all surfaces of the joint. 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.

Non Porous Substrates
All non-porous substrates (e.g. fibreglass, stainless steel, galvanized/coated steel, cast iron, lead, aluminium, brass, polyester powder coat and uPVC etc), along with the base of the Stick-on-Bases, must be degreased and primed using Surface Activator (ADH021).

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/paper towel 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 no longer be effective.

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.

Adhesive Application
The application temperature must be between +5°C and +35°C, and the weather conditions dry.

Apply the Avifix Adhesive in blobs or beads onto the base of the Stick-on-Base in sufficient quantity to achieve an adhesive depth of approximately 1mm across the whole surface area being bonded. One 290ml cartridge of Avifix will glue around 75 Stick-on Bases (1 Litre of adhesive will give an adhesive depth of 1mm/m²).

Carefully align the Birdwire Stick-on-Base onto the substrate and press together, moving it around slightly to get the glue thickness down to around 1mm and to form rivets of glue through the fixing holes in the Stick-on Base. Full adhesive strength will be achieved in approximately 12-48 hours depending on the ambient temperature and relative humidity.

Important – Avifix, 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.

Tool the adhesive using soapy water to leave a smooth finish.

Once the Avifix has dried, after 48 hours, the posts can be wired up the same way as standard drilled-in birdwire posts.

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.

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

Flammable product - No Smoking

Installing Birdwire onto Rails or Pipes

When installing birdwire onto rails or pipes, the number of posts used can be adapted to fit the installation. If the rails/pipes are alone, then a single post will be fine up to around 120mm diameter (315mm circumference). Above this diameter two posts are recommended.
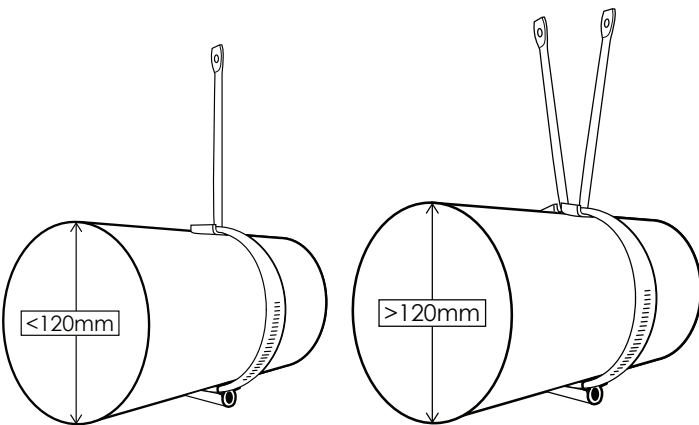
If the pipes are close to other pipes or to a wall, it is advisable to use two posts for narrower diameters.

Installing Birdwire onto Sheet Metal or Cladding

When installing birdwire onto metal cladding or steelwork, Rail Clamp Posts can be used in conjunction with self drill screws.
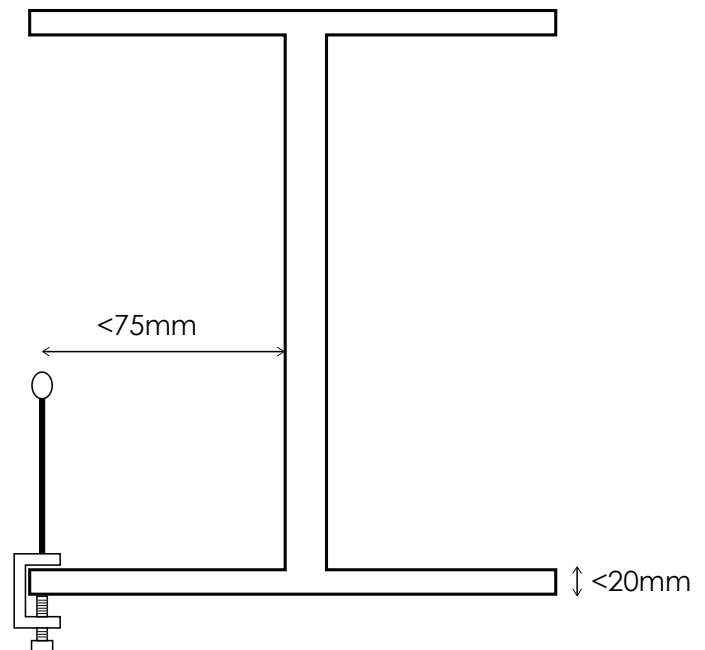
NET126 Pro 20mm Self Drill Screw for substrates up to 2.5mm thick

NET125 Pro 25mm Self Drill Screw for substrates between 1.2mm and 3.6mm thick

NET120 40mm Self Drill Screw for substrates between 6mm and 12mm thick
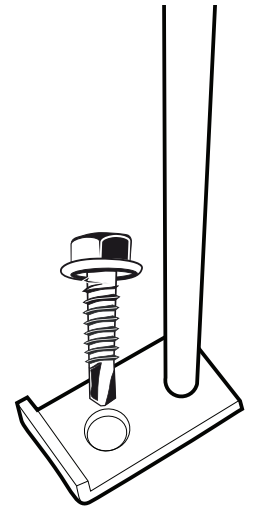
Installing Birdwire onto Beams and Girders

A Beam Clamp and Post (BIR026) can be used to install birdwire onto beams up to 20mm thick. If the beam ledges are more than around 75mm deep, then subsequent rows of birdwire will need to be installed using Stick-on-Bases.

NETWORK

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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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