## Tower Guard Specifications

## MR-MANUFACTURER

Birdzoff manufactures Tower Guard parts from RF Transparent, Nonconductive, and UV resistant plastics and stainless steel.

## PR-PRODUCT PRESENTATION

Tower Guard bird deterrent system is effective against Crows, California Condors, Gulls, Vultures, and Raptors to deter them from perching and roosting on railings, parapets, walls, ledges, pole tops, light fixtures/arms and flat surfaces.

## Many Options and Configurations

Tower Guard has a variety of components to provide a solution to most problem areas.

The base has two variations: V and Round. The V Base is ideal for round or flat railings and has two attachment variations: horizontal slits (use cable ties or hose clamps) or vertical holes (use screws or nails). The Round Base is ideal for flat surfaces including parapets and walls and can be attached with nails, screws, or glue with an optional flat washer. Both bases have a hole for drainage to prevent any liquid build up in the base.

The posts have three variations: Plastic, Plastic with optional safety cap, and stainless steel. The Plastic posts are ideal for structures that require RF Transparency or Nonconductivity. The safety cap provides an extra safety measure for workers when protecting areas with any foot traffic. The stainless steel option is best for ends and corners on large installations to withstand pressure from material flexing during bird perching attempts or weather events. All posts fit in either V or Round bases.

Cord or stainless steel wire can be run through the posts. The cord used is $1 / 8^{\prime \prime} 16$ strand polyester and the same cord found on tennis court nets and has similar durability as the post material. Stainless steel wire can also be used as an alternative option.

Capture the post in the base with a stainless steel clip, polyester cord, or 50lb cable tie.

## UA-Uses, Applications

Tower Guard is a versatile perch deterrent that can be attached to railings, parapets, walls, ledges, pole tops, light fixtures and arms and flat surfaces to exclude larger birds. Tower Guard creates both a visual and physical barrier to keep birds from landing on exposed ledges and other surfaces. The relaxed cords and thin posts both appear and feel unstable to medium and large birds, preventing them from safely balancing. Tower Guard is not recommended for deterring pigeons and smaller birds.

## Al-Assembly, Installation

Pre-assembly of bases and posts is recommended. Simply line up the post holes with those of the base and insert post to bottom of base. Capture the post by inserting a stainless steel clip, a short piece of the cord tied at each end with a simple overhand knot or a 50lb or smaller cable tie (least secure) through the base and post.

Tower Guard bases can be installed without posts to exclude starlings. Substations in power industry have used this solution by running cord through bases at the 2 " level hole.

The posts and cord are easy to remove and reinstall, allowing for maintenance or installation of new equipment. To remove posts, depending on the capture, unclip the stainless clip, untie one knot in the cord, cut the cable tie and lift the post while leaving the cord in place and base on the platform. To keep posts untangled, bring each post together while keeping cord to one side. Tie cord together with a rubber band or cable tie when not in use. Once maintenance or new installation is complete, remove rubber band/cable tie and place posts back in bases, carefully unfolding to limit tangling. Reinstall stainless steel clips, cords with overhand knot, or new cable ties to capture.

Installation of the bases varies. Both the V and Round base can be attached with nails in wood or screws in wood or metal with predrilled holes. The V base also can be attached with plastic cable ties ( 100 lb . or higher), stainless steel cable ties or metal hose clamps inserted through the horizontal slits. If using cable ties, a cable tie tool will provide the most consistent and tight attachments. The holes on the shaft of each V base should face those of the adjacent base for optimal cord positioning. To maintain RF transparency or Nonconductivity, attach using plastic cable ties or cord as capture.

The Round base can be attached with a magnet or a flat washer and high-quality adhesive. When using the round base and magnet or washer option, pre-assembly is necessary. Attach magnet or washer to bottom of round base with the supplied screw.

Creative shims can be added for additional attachment options for exclusion on unique platforms.

The Tower Guard should be placed with no more than 5 ' between bases. The cord should be tied off every $100^{\prime}$ or 21 posts in a linear installation. Chalk lines are helpful for maintaining a linear positioning during installation. Determining length between Tower Guard bases on curved areas must be done on site to identify the best distance between posts. Tower Guard bases should be installed no more than $2^{\prime \prime}$ from the front edge. When installing multiple rows, each additional row should sit $10^{\prime \prime}$ from adjacent row and staggered $21 /{ }^{\prime}$ distance-centered from the nearest post.

## ST-Spacing Tips

For easy measuring, cut a piece of wood or PVC (V base-4' $83 / 4$ or round base $4^{\prime} 81 / 2 "$ long) and place at the edge of the first base. Place the next base at the end of the spacer for the accurate distance placement. On a curved installation, that spacing will have to be determined during installation.

When installing with adhesive, it is important that the surface area is clean, dry and solid. For an additional level of protection and stability, add screws in the designated holes. Tapcon screws may be used when installing on cement surfaces.

## ME-Maintenance

Tower Guard is virtually maintenance free and should be checked every 3 months.

## TS-Technical Support

Birdzoff provides free consultations for installation and maintenance questions. Call Birdzoff at 886-247-3963 or Bird Barrier at 310-527-8000 with inquiries.

## Guarantee

Tower Guard comes with a 5 -year guarantee against manufacturing defects and Ultraviolet degradation.

Optional Safety Tip
 Stainless steel



## V-Base

Fits on round or flat railings Attach with cable ties/hose clamps or nails/screws Drain hole

Round Base
Fits on flat surfaces
Attach with nails or screws Glue with optional flat washer Drain hole


Cord should sag slightly with no load on posts Tie cord off every 100'

Mount bases no more than 2" from edge
Stagger rows 2.5'


