

Installation / usage instructions for: Bird-Proof Gel & Bird-Repellent Liquid.

Bird Proof is a long lasting, non-poisonous, tacky bird repellent for use on ledges, sills, beams, rafters and hundreds of other indoor and outdoor locations where "nuisance birds" alight or roost. When applied according to instructions, Bird Proof transparent repellent can effectively discourage pigeons, starlings, house sparrows and certain other nuisance birds from roosting on or returning to a treated area for up to one year.

Why Effective Bird Control is important:

More than **60 transmissible diseases** (some of which are fatal) are associated with pigeons, starlings and house sparrows and their droppings. For example:

- **Histoplasmosis** is a potentially fatal respiratory disease resulting from a fungus growing in dried droppings.
- **Candidiasis** is a yeast or fungus infection spread by pigeons. The disease affects the skin, the mouth, the respiratory system, the intestines and the urogenital tract, especially the vagina. It is a growing problem from women, causing itching, pain and discharge.
- **Cryptococcosis** is caused by a yeast found in the intestinal tract of pigeons and starlings. The illness often begins as a pulmonary disease and may later affect the central nervous system. Since attics, cupolas, ledges, schools, offices, warehouses, mills, barns, park buildings, signs, etc. are typical roosting and nesting sites, the fungus is apt to be found in these areas.
- **St. Louis Encephalitis**, an inflammation of the nervous system, usually causes drowsiness, headaches and fever. It may even result in paralysis, coma or death. It occurs in all age groups, but is especially fatal to persons over age 60. The disease is spread by mosquitoes which have fed on infected house sparrows, pigeons and house finches carrying the Group B virus responsible for St. Louis Encephalitis.
- **Salmonellosis** often occurs as "food poisoning" and can be traced to pigeons, starlings and sparrows. These bacteria are found in bird droppings; dust from droppings can be sucked through ventilators and air conditioners, contaminating food and cooking surfaces in restaurants, homes and processing plants. Besides being direct carriers of disease, nuisance birds are frequently associated with over 50 kinds of ectoparasites, which can work their way throughout structures to infest and bite humans. About two-thirds of these pests may be detrimental to the general health and well-being of humans and domestic animals. The rest are considered nuisance or incidental pests. A few examples of ectoparasites include:

- **Bed bugs (*Cimex lectularius*)** may consume up to five times their own weight in blood drawn from hosts, which include humans and some domestic animals. In extreme conditions, victims may become weak and anemic. Pigeons, starlings and house sparrows are known to carry bed bugs.
- **Chicken mites (*Dermanyssus gallinae*)** are known carriers of encephalitis and may also cause fowl mite dermatitis and acariosis. While they subsist on blood drawn from a variety of birds, they may also attack humans. They have been found on pigeons, starlings and house sparrows.
- **Yellow mealworms (*Tenebrio molitor*)**, perhaps the most common beetle parasite (of humans), live in pigeon nests. They are found in grain or grain products, often winding up in breakfast cereals, and may cause intestinal canthariasis and hymenolepiasis.

BIRD-PROOF GEL

This is a safe, transparent compound, which is applied to places where pest birds rest, roost or nest. It's nonpoisonous, so it's safe to handle and will not kill birds when used according to directions. Also, because of its unique chemical formulation, this gel will retain its effectiveness for up to one year (under most weather conditions) therefore, birds learn to avoid treated areas and seek new locations for roosting. Many pest control experts recommend Bird Proof Gel as the best way to solve pest bird problems.

Apply with a standard caulking gun. Trim the end of the plastic spout of the cartridge to a taper and puncture the seal, then insert the cartridge into the caulking gun carriageway.

To apply, keep the tapered, flat section of the cartridge spout uppermost, but resting lightly on the surface to be treated. Then, draw the caulking gun slowly towards you while applying steady pressure on the trigger during the full distance of travel. This technique provides a solid bead (strip) of gel repellent approximately ½" wide and ensures satisfactory results.

Don't waste product with haphazard applications, instead, be systematic: Clean the surface before applications; remove dead birds, nets, etc., then wire brush or scrape the surface to remove dust, dirt, droppings, loose paint, etc.

Porous surfaces, such as stone or unpainted wood, should be sealed prior to application; brush or spray on a coat of shellac, a 50% solution of white glue, or silicone solution, then allow to dry. Treat all landing places on the entire building for best results.

On narrow surfaces, such as rain gutters, roof peaks, ornamental trim, rose windows, portholes or column caps, generally ½" bead (strip) is enough; on wider surfaces, such as chimneys, downspouts, eaves, dormers, bell towers, fire walls (parapets), electrical signs and related structures, I-beam and braces, air conditioner and heating ducts, additional beads may be needed. Furthermore, some birds tend to overshoot their intended landing spots requiring additional strips of repellent. Apply as follows: Surfaces less than 4" wide, apply a ½"-in diameter bead approximately 1" in from the outside edge; surfaces greater than 4" but less than 8" wide, apply two beads about 2" apart, beginning approximately 1" in from the outside edge; wider surfaces, apply three beads, with the third bead located about 2" in from the second (5" in from the outside).

• **GUTTERS, GUTTER BOXES DOWNSPOUTS** - When birds nest in these areas, they clog the natural flow of water which can result in expensive roof and interior water damage. Treat the outermost tip of gutters, laying a continuous ½" bead the full length of the gutter. There should be breaks in the bead to allow water to flow into the gutters. Downspout curves under roof overhangs are occasionally the sites of nests and concentrated

droppings. In order to treat the area properly, remove all nests and clean the surface before application. Apply two beads, beginning 1" in from each outside edge.

- **PITCHED ROOF RIDGES, EAVES, DORMERS** - Treat the entire length of the roof ridges (including eaves and dormers) with at least one continuous bead of gel. Don't forget to treat the flashing where eaves and dormers join the roof. Lay a series of broken beads 2" to 3" apart. Protrusions under the eaves of a dormer require treatment because birds build nests in these sheltered areas.

- **CHIMNEYS** – Apply gel along the outside edge of the chimney cap and along the flashing where the chimney joins the roof, a place where birds nest and seek warmth and shade. On the chimney cap, apply a single bead 1" in from the outside edge.

- **BALCONIES** - Where the tops of railings require bird-proofing, first protect the railing by covering with cloth tape; then apply gel over the tape. Also treat floors of balconies beneath railings 1" in from the outside edge. Be sure to caution residents to stay clear of treated areas. Remove the tape from the railing after the birds no longer return to the area.

- **MONUMENTS, CURVED SURFACES** - Apply where birds have been roosting or are likely to roost.

- **COLUMN CAPS** – Apply gel in ½" beads approximately 1" in from the outside edge of the cap and all areas adjacent to it, wherever evidence of birds is found. Remember, that besides being functional, columns and caps are designed to be attractive; therefore, neatness and attention to detail are important!

- **SIGNS, MARQUEES, SUBSTRUCTURES & LETTERS** - Turn *off* all electrical current before applying gel to lighted signs. Tar flashing, as well as the rest of the deck, may have to be cleaned thoroughly prior to application (this should be considered a billable expense). Apply gel to all supporting beams and braces above and below the sign or marquee; the number of beads (strips) will depend on both the severity of the bird problem and the width of the surfaces. It may be helpful to have representatives from the sign service company present during applications to ensure that gel is not applied where personnel will be walking. To calculate the amount of gel required to treat a sign, measure the lineal footage from one end of the sign to the other, and multiply by three for estimating purposes. Don't forget to add rods, pins or structural steel frameworks that support the letters.

- **LETTERING** - Birds are likely to roost and build nests in these areas on the fronts and sides of buildings where letters have been mounted to spell out the company's name. Droppings make these areas unsightly.

- **ORNAMENTAL TRIM** (i.e. "gingerbread") - Be sure to clean all droppings from the ornamental trim before applying gel to all landing and nesting areas. Remember also that in order to retain the beauty of ornamental trim, it is imperative to be as neat as possible. Since ornamental trim is usually narrow, simply apply one ½" bead of gel to surfaces where birds land.

- **ROSE WINDOWS, PORTHOLES** - Since birds do not roost on vertical surfaces, it is only necessary to treat the horizontal roosting areas of rose windows or portholes with gel. Generally, one ½" bead along the edges is enough. Wider ledges may require two or more beads. Treat any cornice wide enough to serve as a landing site for birds. **HINT:** Pay extra careful attention to church rose windows when applying gel. These windows are extremely expensive to replace and are considered works of art.

- **BELL TOWERS & STEEPLES** - Although they vary in shape and size, these areas are treated like any other pitched areas. Hire steeplejacks on an hourly basis to work on ridges and other normally inaccessible areas where rigging and ladders cannot be used. If gutters surround the tower, remove nests and debris and treat

the gutters and tops of downspouts. Screening in front of bell tower openings may be required after gel application (birds will not alight on treated areas, but instead may seek shelter inside the tower itself.)

- **PARAPETS OR FIREWALLS** - Usually capped with stone, tile asphalt, shingles, wood, tar, metal, etc., a parapet is the extension of a wall above the roofline of a structure.

- **SPECIAL INDOOR APPLICATIONS** - Follow suggestions above to apply on natural roosting areas such as interior beams, conduits, light fixtures, joists, pipes, etc., wherever birds are roosting.

- **BEAMS, BRACES & STEEL STRUCTURES** - Structural steel appears at many outdoor and indoor locations including aircraft hangars, loading docks, amusement park or race track decks, plant interiors, etc. Birds frequently roost in these areas. Applicators may be able to apply by walking along beams and braces with the caulking gun in hand and laying as many beads as necessary. Movable cranes and lift hoists are helpful where available. In other situations, ladders and additional equipment will facilitate application. When treating I beams, apply to all four lips in areas of high bird concentration. The actual number of beads required will be determined by the severity of the bird problem. Apply a single continuous bead along each inside lip of structural steel or I-beam where nuisance bird problems are not intense; otherwise, lay additional beads. If crust develops on Bird Proof after it has been applied in an excessively dusty area, simply score it with a screwdriver, putty knife or similar instrument to renew the surface for extended bird control. Where large numbers of nests have been removed, check newly-treated areas often for signs of returning birds.

Calculating Your Bird Proof Gel Needs

Gel comes in easy-to-handle, 10 fl. oz. cartridges that fit any standard caulking gun; this is a handy way to treat large areas, even an entire building. Determine how many cartridges of gel will be needed by dividing the total number of linear feet to be treated by 10 (each cartridge will treat 10 feet). One case of gel contains 12 cartridges, enough to lay a bead (strip) 120 feet long.

BIRD PROOF LIQUID

This is similar to gel. It is opaque white when first applied, and rapidly dries to a transparent, colorless film. Spray or paint onto various surfaces giving broad coverage compared with the beads of the gel.

Brush onto the top surface to be treated or apply by sprayer. Hand pumped sprayers or mechanical equipment may be used with a discharge pressure of 40 to 50 p.s.i. Do not dilute the liquid; thoroughly shake or mix it prior to use. Surfaces to be treated must be clean, free of dust, and dry. Use any spray equipment with generated pressure up to 150 p.s.i. for application; aerial application is not permitted.

For interior use, treat beams girders, struts, supports, pipes, etc. and anywhere birds may land or roost. Cover machinery, floors, etc. to prevent spray drift or runoff from falling on them during application. Liquid should be applied as a continuous layer on the top surface of the structure being treated. For larger birds, e.g.. pigeons and starlings, more than one application may be necessary to create a thick enough layer for the repellent to be most effective.

For exterior use, liquid is not recommended for application to outside buildings or structures due to the difficulty in controlling spray drip and runoff and the possibility of stain. The difficulties in removing the material from extensive treated surfaces also restrict exterior structure applications.

Treat trees, bushes, shrubs and vines etc.. Apply liquid to the point of runoff to the top of all branches large enough to support a bird. Again, cover or otherwise protect all exposed areas not to be treated to avoid spray drift and runoff causing damage. Treat living plants only during dormant period. Application to foliage may

result in the blocking of respiration and death of the affected foliage might occur. In severe cases the whole plant may die. Bird Proof Liquid contains no toxic materials to plants or animals, but the Bird Proof itself can physically block and prevent respiration.

Spray when temperatures are at least 40°F in calm weather to facilitate drying, and to minimize spray drift.

Calculating Your Bird Proof Liquid Needs

Coverage is dependent on the object being treated and the spray equipment. Generally one gallon of liquid will treat an average tree with a 5" diameter trunk or approximately 6 three-foot high shrubs. One gallon will also cover approximately 125 square feet of a surface. The approximation should be used only as guidelines.

Removal of Bird Proof

Use a **SOLVENT CLEANER** such as our Surface Cleaner, mineral spirits, naphtha or powder types cleaning agents to clean Bird Proof. Spills may be washed off with water if cleaned immediately.

Note: Do not spray directly on birds. Do not apply at locations where the user has concern that desirable birds or protected birds may become entangled in the film. Avoid contamination of food or livestock feed.

Safety Hints

Although it has been suggested previously, it cannot be emphasized too strongly that safety of the personnel actually applying the repellent is of utmost importance.

- 12' ladders are adequate for many applications; a 40' extension ladder should also be available. Also, 300' of ¾ No. 1 manila rope is suggested (because other types may stretch) for use as a safety line or to secure or hoist ladder extensions. Cornice hooks (24" gap from tip of hook to shank) are also helpful. Use a boatswain's chair in tandem with a block and tackle and a cornice hook for applications where ladders are impractical. "Cherry Pickers", in heights from 40' to 120', or swing stages, are frequently used in places inaccessible to ladders or for treating wide areas. Two kinds of scaffolding are available: where there are level floors, rolling scaffolds are ideal for treating indoor locations such as I-beams, etc., and for up and down movement, power scaffolds which can be erected to any desired height are helpful.
- Bird Proof works in hot, cold and moderate temperatures. It retains its tack from 15°F to 200°F.
- To make application safer and faster, obtain respirators, rubber (or other nonferrous material) gloves, non-skid soled shoes, hard hats, safety glasses or goggles, wire brushes, shovels, brooms, and paint sprayers. Keep shellac, white glue or silicone solution on hand for sealing porous surfaces prior to application. Use a Solvent Cleaner and/or mineral spirits for clean up.
- Be sure that your personnel (or those of a contractor) are adequately covered by Workers' Compensation.
- On occasion, it may be advisable to hire steeplejacks, roofers, ironworkers, painters, window washers, fire fighters, etc., to perform application on very high locations such as steeples and bell tower ridges.

SOME FINAL WORDS OF ADVICE...

- Before application, inspect complete structure for roosting areas not obvious from usual vantage points.
- When using gel, leave a 1" break in the beads (strips) at least every 10 feet to allow for water drainage (where necessary). In areas of excess rainfall, breaks can be as little as 18" apart.
- Use mineral spirits or B-X Safety Solvent Cleaner to clean application equipment after use.
- Under most weather conditions, one treatment of Bird Proof will last up to a year. Areas of heavy bird concentration may require additional applications.
- Wear rubber (or other nonporous material) gloves when removing dead animals, nests or droppings from application sites. Dead birds should be placed in plastic bags for proper disposal.
- To help guard against bird-related diseases, use an appropriate respirator recommended by a safety supply house when cleaning the areas to be treated.
- If you have any suggestions about additional uses of Bird Proof, please contact us. We will gladly consider your information in future publications.