



PEST INVASION 2014

PREMIER FOOD INDUSTRY PEST MANAGEMENT SEMINAR

Bird Control in Food Processing Facilities





Vince Forni & Chris Bowley



800-NO-BIRDS

www.BirdBarrier.com



Bird Control in Food Processing Facilities

- The problems associated with birds
- How to reduce the attractiveness of the site

Bird Abatement Strategies

- Dispersal
- Harassment techniques
- Birth control
- Mechanical deterrents





800-NO-BIRDS

www.BirdBarrier.com



Why is Bird Control Required?

- For the same reason that any pest management is required:
- Compliance with HACCP Requirements
- Avoidance of Regulatory attention
 - What do I mean by this?
 - Birds are the most visible of pests – and can become a “beacon” for inspectors looking to knock points off an audit score!



Why is Bird Control Required?

- **Principles of HACCP**
- There are three (3) steps in a HACCP system:
 - Identify the hazards.
 - Control the hazards.
 - Monitor the effectiveness of the controls.

These 3 steps describe the way Bird Control / Management should be done!





Problems from Pest Birds

Image - Reputation

Cost

Shutdowns

Damaged goods

Health Risks

Regulatory Compliance



Interior Problems



800-NO-BIRDS

www.BirdBarrier.com



Interior Problems



Interior Problems



800-NO-BIRDS

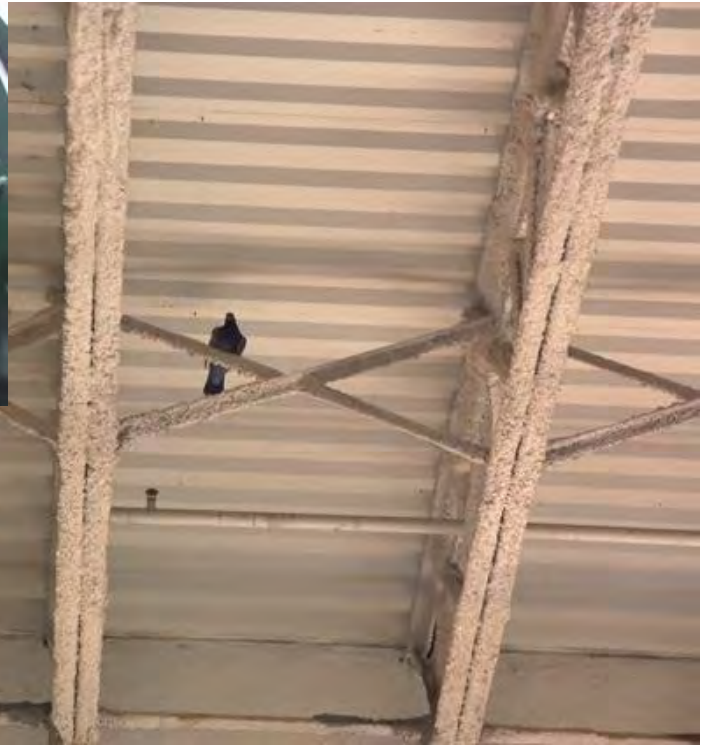
www.BirdBarrier.com



Interior Problems



Overhead Problems



Rooftop Problems



800-NO-BIRDS

www.BirdBarrier.com



Rooftop Problems





800-NO-BIRDS

www.BirdBarrier.com



Pigeon – *Columba livia*

Size: 12” to 15”, 10oz - 16oz

Life Span: 3 to 4 years

Food: Varied, human scraps, seeds, corn

Habitat: Buildings and trees

Nesting: Simple nest, twigs, or random trash. Droppings right in nest

Breeding: Monogamous, 3-4 broods per year, 2-3 eggs. Incubate 18 days



Starling – *Sturnus vulgaris*

Size: 7” to 8”, 2oz to 3oz

Life Span: 5 to 7 years

Food: Insects, wild fruit, seeds, grain

Habitat: Trees and buildings

Nesting: Enclosed areas, small openings,
often evict other birds

Breeding: Two broods per year, 4-5 eggs,
12 day incubation



Seagulls – *Larus spp.*

Size: 18” to 26”, 25oz to 38oz

Life Span: 8 to 10 years

Food: Scavenger, fish, crab, insects, dumps

Habitat: Ground and buildings

Nesting: Seaweed, twigs on ground in safe open areas

Breeding: One brood per year, 3 eggs, 24 day incubation



Sparrow – *Passer domesticus*

Size: 5” to 6”, 1oz

Life Span: 1 to 2 years

Food: Seeds, grains, insects and fruit

Habitat: Trees and buildings

Nesting: Enclosed areas, small openings, small twigs, grasses, twine (soft)

Breeding: 3 broods per mating season, 4-7 eggs, 20 offspring per year



Two New Species



Skyrat



Spouse



Bird Pressure

- Why are birds attracted to the facility?
- How committed are the birds?
- Review the History : What caused prior control methods to fail?



Elements of bird pressure:

- Overnight roost
- Level of protection/exposure available
- Food and water availability/controllability
- Alternative sites
- Flock commitment



Heavy Pressure

- Birds are very committed to the site
 - Night-time roost, nesting area
 - Best shelter, overhead cover and back wall
 - Generations of birds- same spot
 - Exclusion may be the only solution



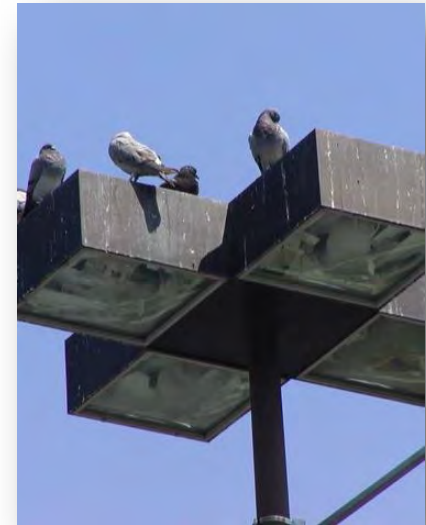
Medium Pressure

- Birds are fairly committed to site
 - Place for sun, shade
 - Look for predators, prey
 - Scavenging site jump-off
 - Part of birds daily route - used habitually
 - Many ledge protection solutions available



Light Pressure

- Take it or leave it site
 - Afternoon relax in sun



Why Are They Here?

1. Food
2. Water
3. Attractive habitat

Sound familiar?

Birds are no different from any pest in their requirements for survival.





Food

1. What?
2. Where?
3. Can it be reduced, or eliminated?

** Can it be used to enhance a control program?*



Water

1. What?
2. Where?
3. Can it be reduced, or eliminated?

Bird need to drink more than they need to eat. (Familiar again?).



Water

Where to look

1. Refrigeration
2. Floor cleaning
3. Water fountains
4. Drains
5. HVAC condensation



Habitat



Does Your building provide:

1. Loafing, staging areas?
2. Protection from environment?
3. Safe haven from predators?

Then it is a perfect habitat.



Bird Abatement

1. Dispersal
2. Birth control - Ovocontrol[®]
3. Mechanical deterrents

Habitat modification

Behavioral modification

Exclusion



Dispersal



Dispersal

- Used to reduce population pressure
- Can be used to protect specific, perhaps sensitive areas (move birds to less sensitive zones)
- Reduce the “pressure” on other control measures
- Excellent for ongoing management – prevent new flock establishment



Trapping

Species - Pigeons, sparrows, grackles, starlings

Labor - High unless just a few birds

Best Suited - Small flocks, discreet settings

Drawbacks

- Time consuming
- Birds may return if not destroyed or released far enough away



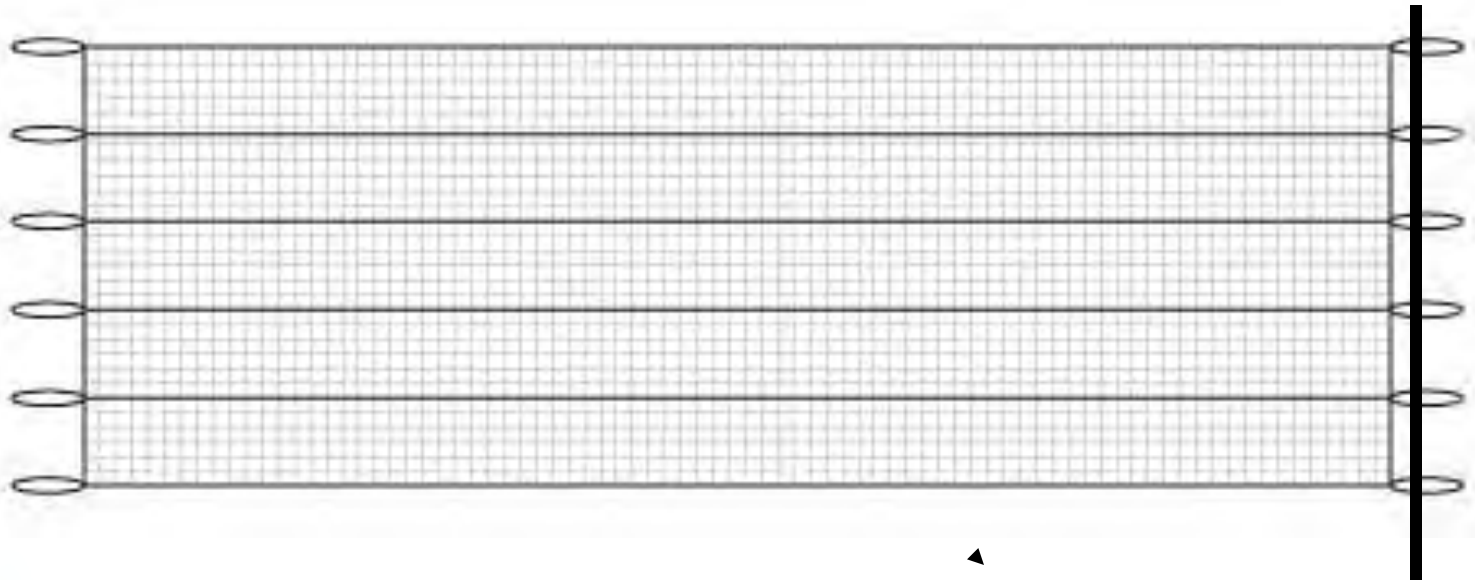
Trapping



- Bird Barrier has new **sparrow** trap – extremely effective and discreet
- 2014 model can be fitted with audio module that emits inquisitive “chirp” and draws birds very quickly.



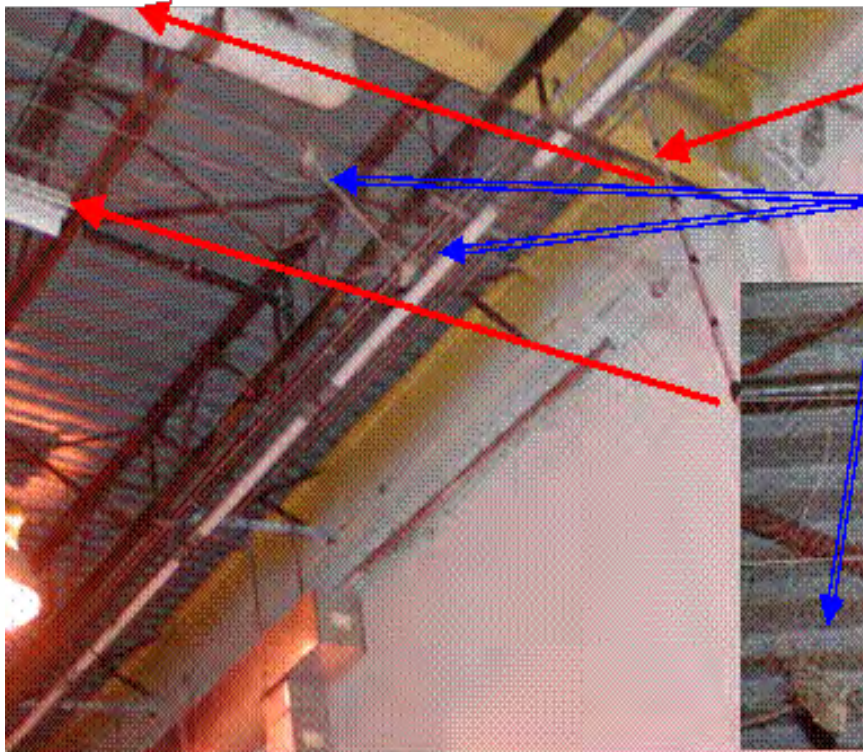
Mist Nets



Attach net to Pole



Mist Nets

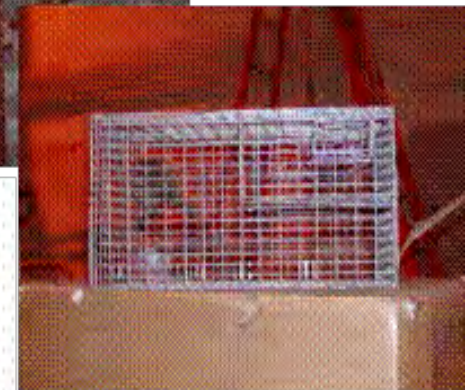


Mist Net is hung horizontally across warehouse flight path.

Birds strike net and get caught.



Remove Birds from the Mist Net and store in a cage for removal from the facility.



Shooting with Air Rifle

Species - All that are legal (pigeon, sparrow, starling)

Labor - Varies by job

Best Suited - Commercial, industrial, rural
(away from public view)

Drawbacks

- Possible fire-arm restrictions
- Possible permits
- Public reaction to shooting



Birth Control – OvoControl

Species – Pigeons only (for now)

Labor - Light

Best Suited - Flocks in rural, commercial areas

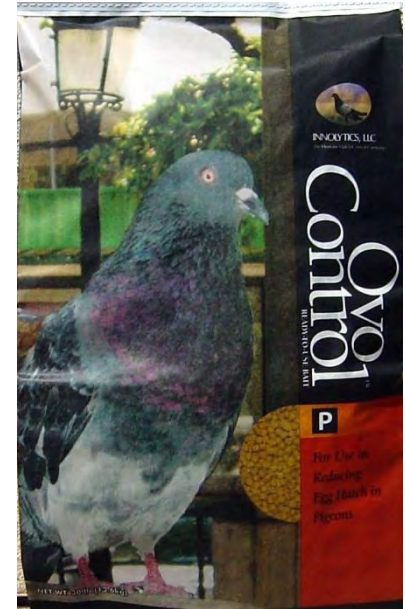
Features

- 50-60% reduction each year
- EPA Registered, General Use
- Humane



OvoControl Program

- Establish baiting site(s) for bite size kibbles
- Feed on rooftops or other flat surface
- Evaluate bait acceptance
- Condition birds to the daily feeding
- Use automatic feeder





Field Efficacy of OvoControl

- OvoControl will interfere with ~95% of eggs if bird consumes the bait¹
- Field data shows 53% population reduction within 12 months^{2, 3}

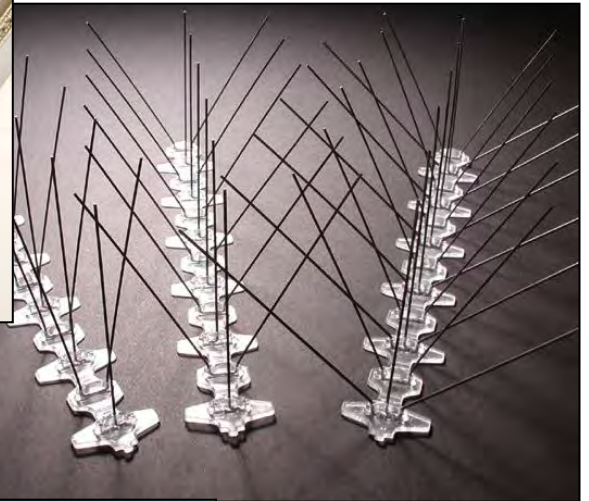
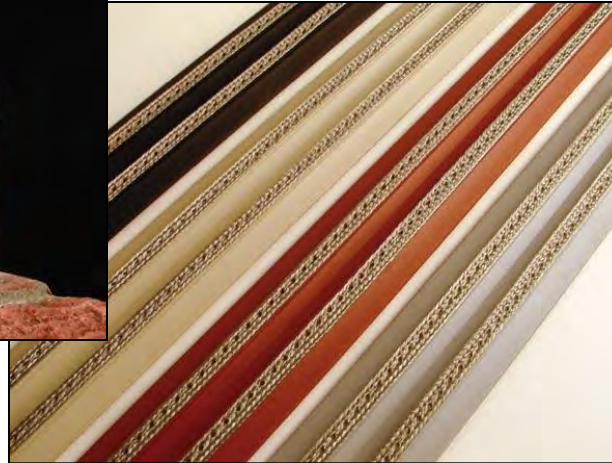
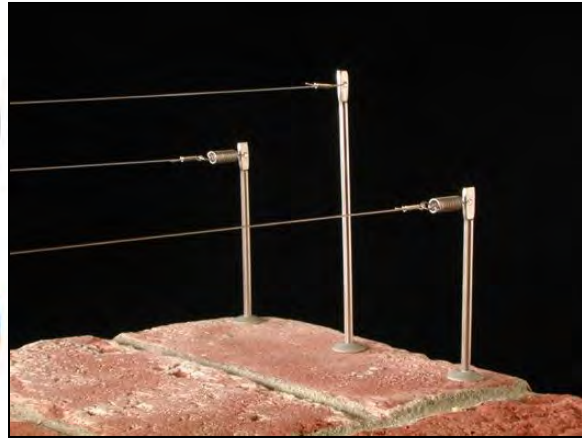
¹ Barbato, 2006

² Freedom Co, Spl., Rimini, Italy, 2006

³ San Diego field study, 2008



Mechanical Solutions



800-NO-BIRDS

www.BirdBarrier.com



StealthNet[®]



800-NO-BIRDS

www.BirdBarrier.com

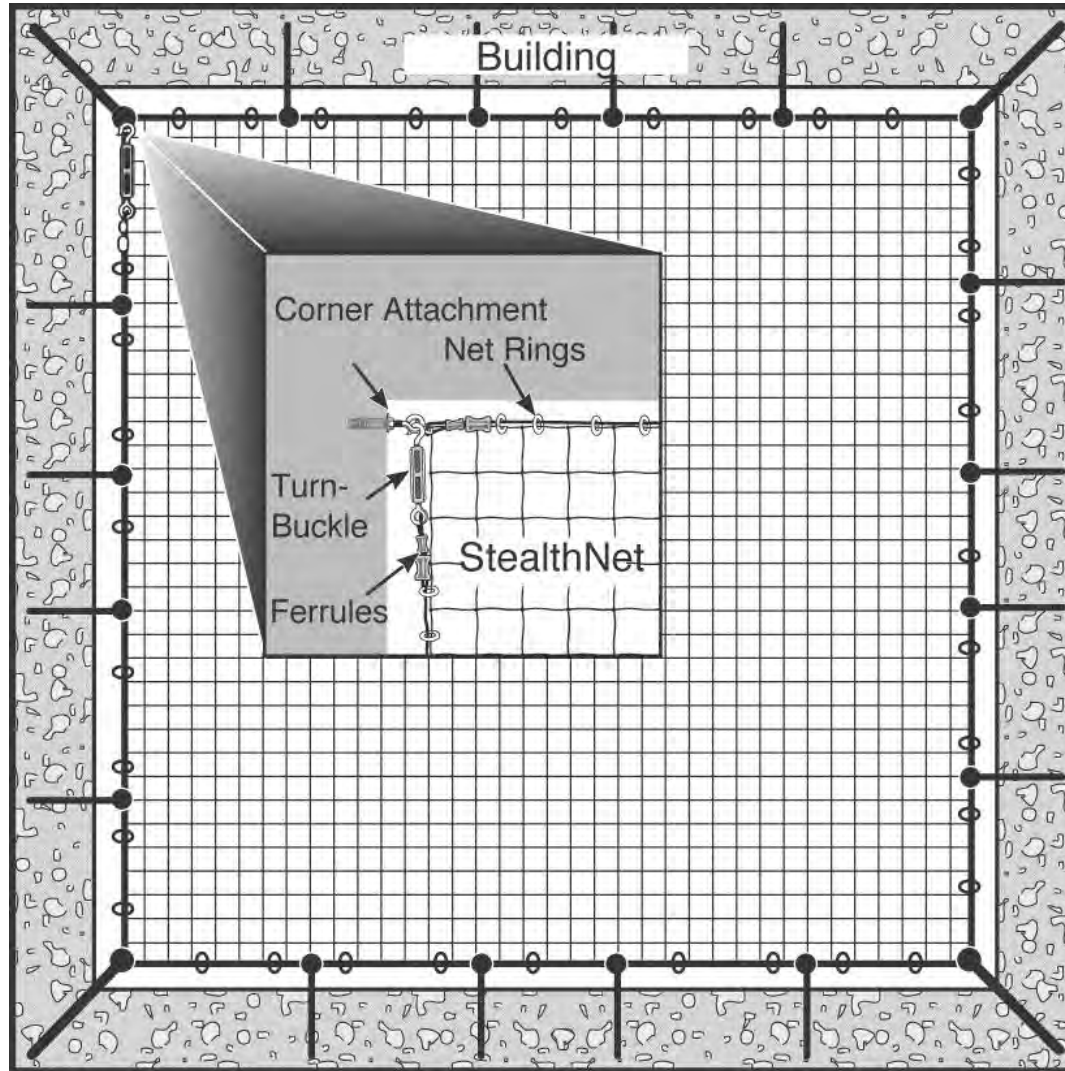


StealthNet

- Pressure- ALL
- Target species-ALL
- Installation- Involved
- Sizes:
 - 2 in. for Pigeons and larger
 - 1 1/8 in. for Starlings and larger
 - 3/4 in. for all birds



Installation



Warehouse ceiling

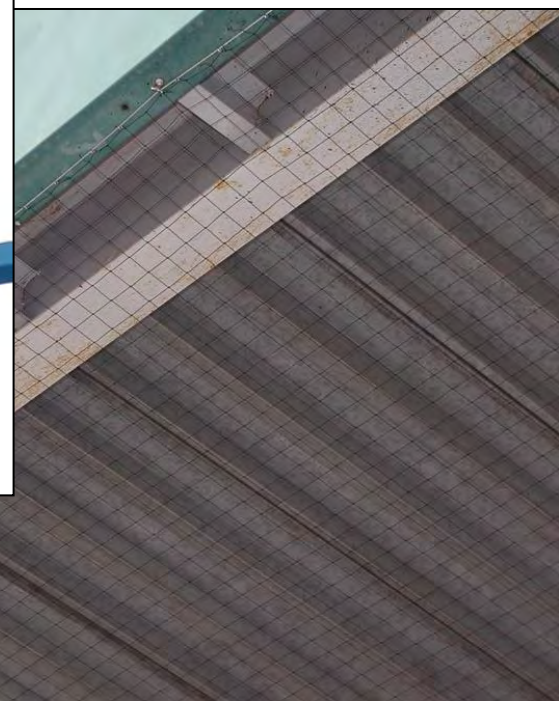


800-NO-BIRDS

www.BirdBarrier.com



Net Ring in action



800-NO-BIRDS

www.BirdBarrier.com



Case Study



800-NO-BIRDS

www.BirdBarrier.com



Flexibility – no interference with routine maintenance



800-NO-BIRDS

www.BirdBarrier.com



Roof net over stacks



Large Overhang



Creative Uses

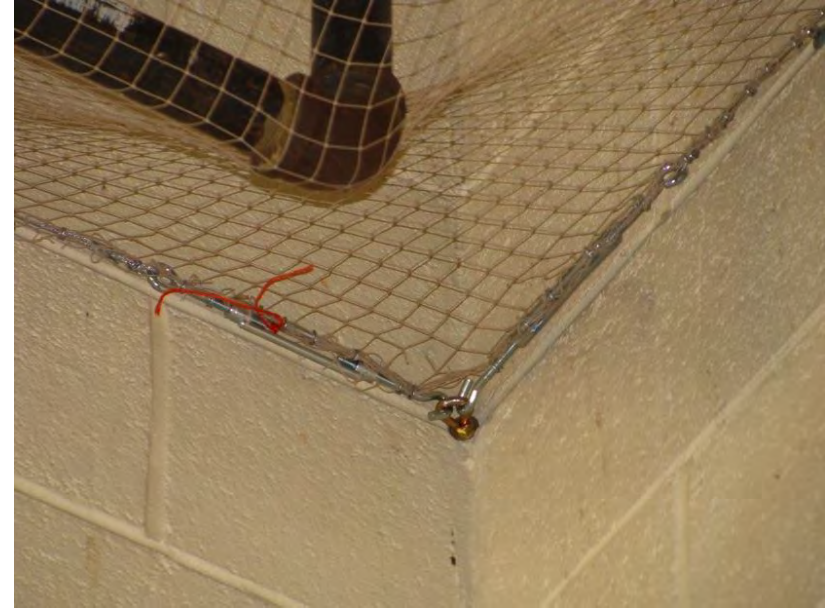


800-NO-BIRDS

www.BirdBarrier.com



Hardware





800-NO-BIRDS

www.BirdBarrier.com



Zippers for Access



HVAC Netting System





800-NO-BIRDS

www.BirdBarrier.com



Detail Work





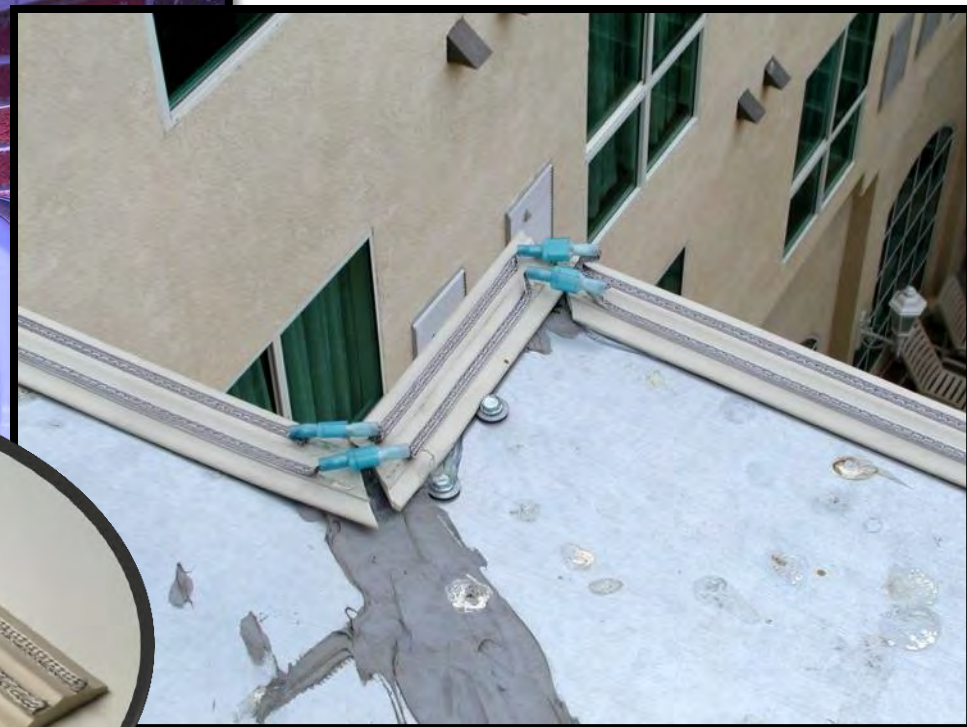
Le

Goals

1. Create unstable landing surface
2. Make unattractive to birds, not to people



Bird-Shock Flex-Track®

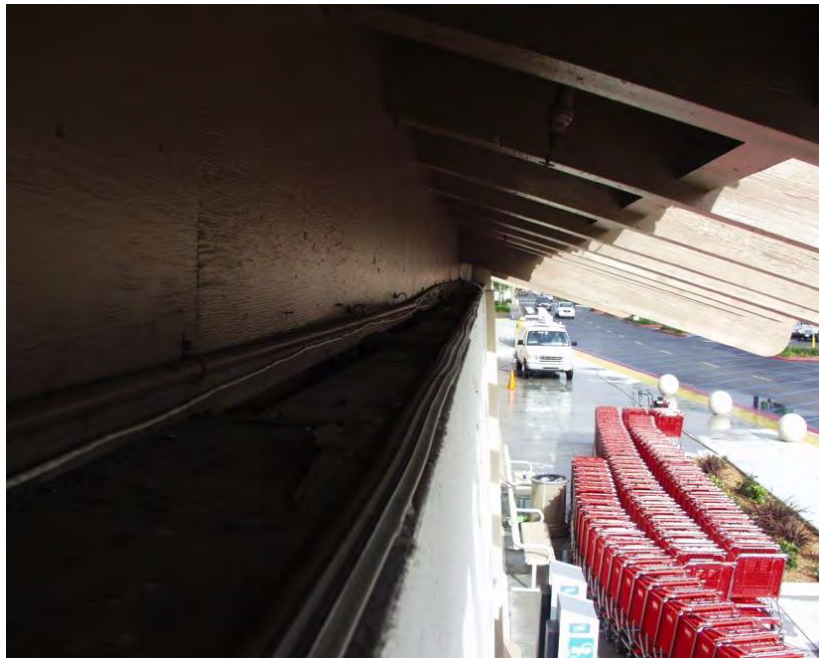


800-NO-BIRDS

www.BirdBarrier.com



Bird-Shock Flex-Track®



800-NO-BIRDS

www.BirdBarrier.com



Chargers

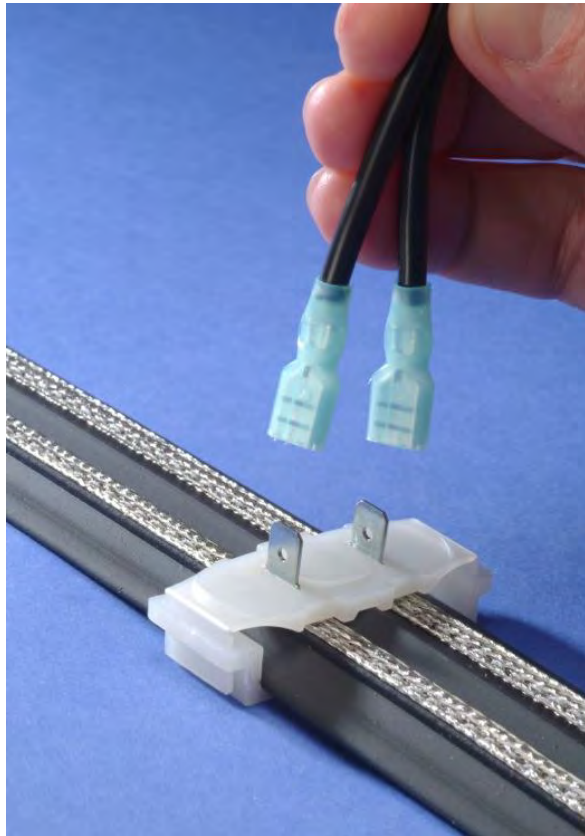


800-NO-BIRDS

www.BirdBarrier.com



Connections



Bird-Shock Flex-Track[®]



800-NO-BIRDS

www.BirdBarrier.com



Bird-Shock Flex-Track[®]

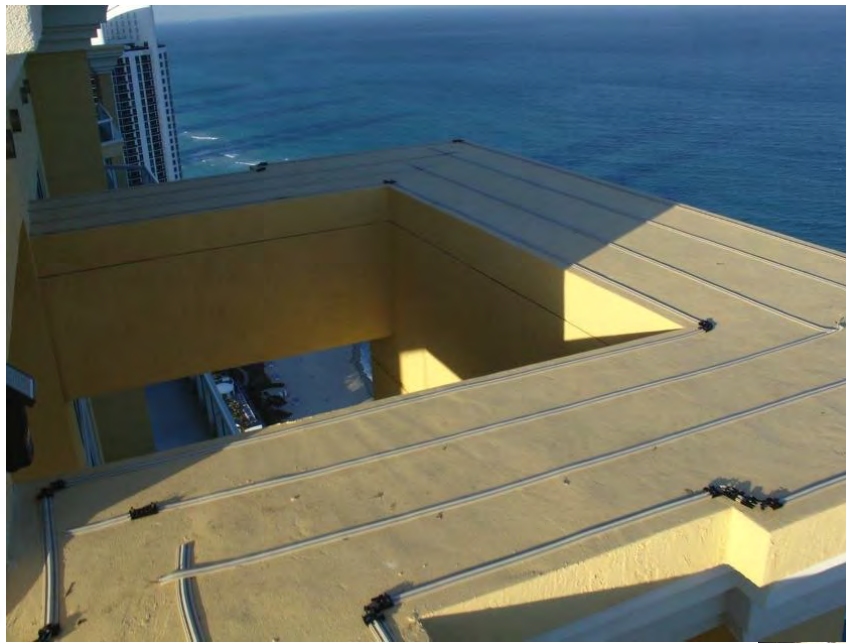


800-NO-BIRDS

www.BirdBarrier.com



Wide Ledges

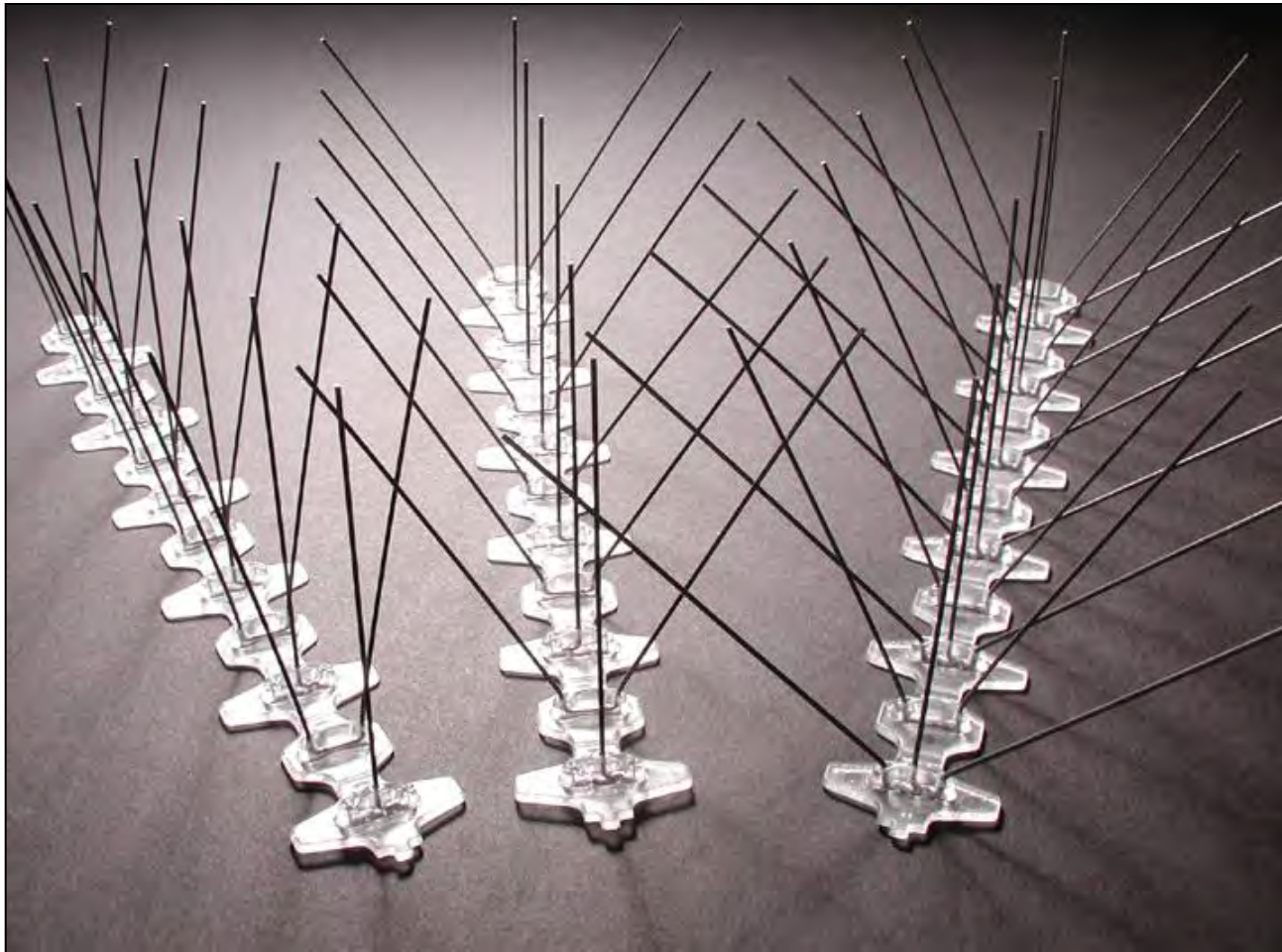


800-NO-BIRDS

www.BirdBarrier.com



Bird-Flite[®] Spikes



Narrow

Wide

Xtra-Wide



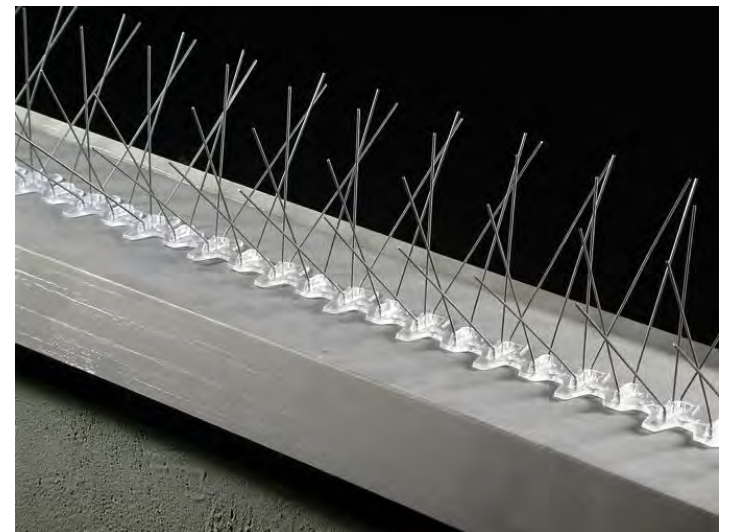
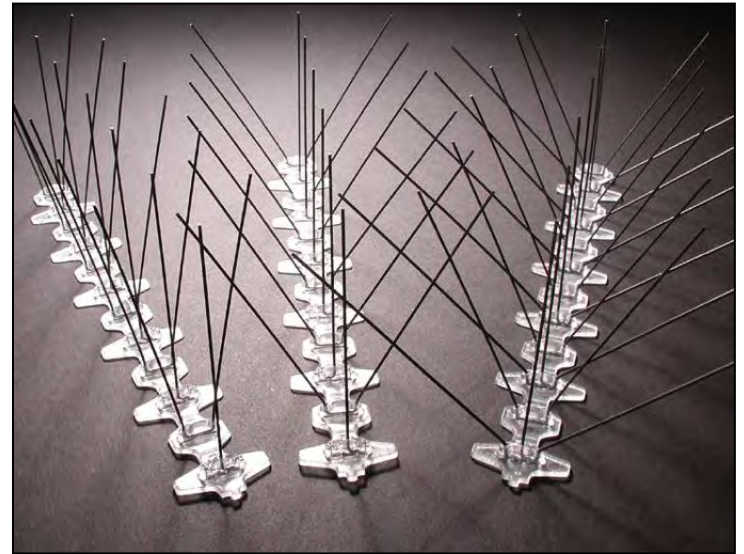
800-NO-BIRDS

www.BirdBarrier.com



Bird-Flite[®] Spikes

- Pressure- Light to Medium
- Target species-Pigeons and larger
- Installation-easy
- Installation time- 2 to 3ft per minute
 - Review Access



Bird-Flite[®] Spikes



800-NO-BIRDS

www.BirdBarrier.com



Bird-Flite[®] Spikes

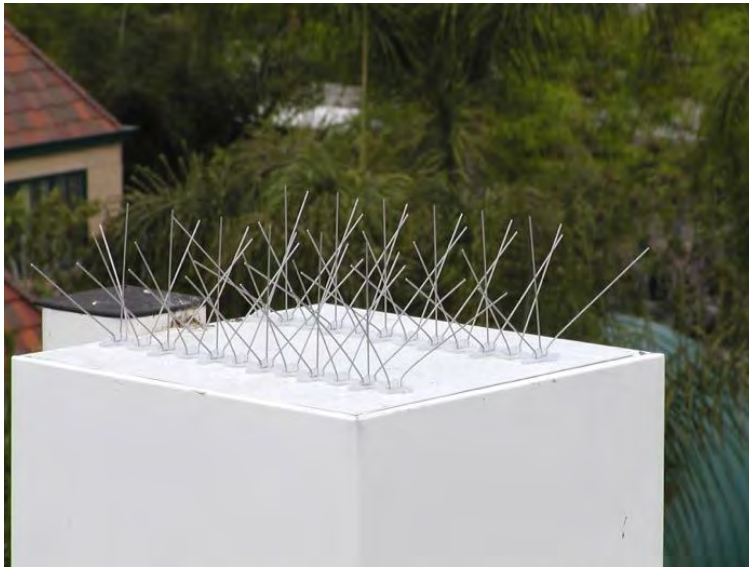


Before



After





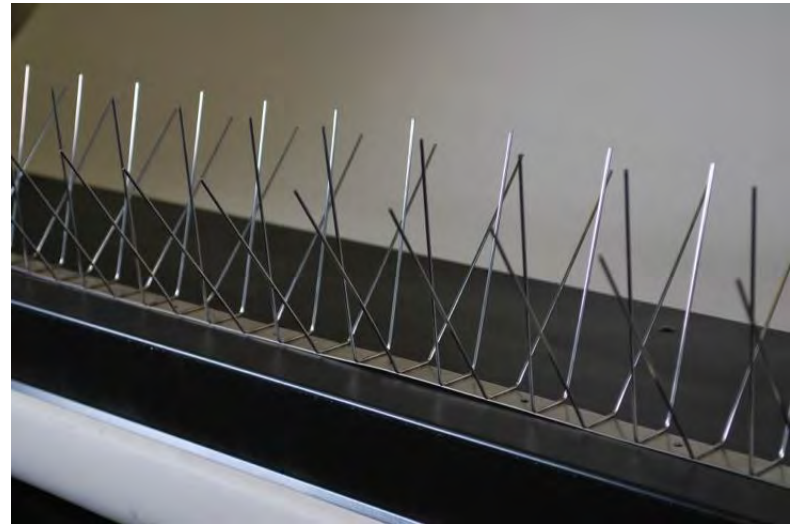
800-NO-BIRDS

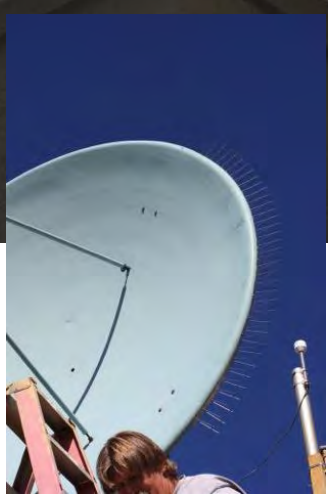
www.BirdBarrier.com



Dura-Spike[®]

- All Stainless Steel
- Pressure- Light to Medium
- Target species-Pigeons and larger
- Installation-easy
- Installation time- 2 to 3ft per minute





800-NO-BIRDS

www.BirdBarrier.com



BirdSlide®

- Pressure- All
- Target species - All
- Installation - Skilled
- Installation time – Varies



BirdSlide®



800-NO-BIRDS

www.BirdBarrier.com





P



800-NO-BIRDS

www.BirdBarrier.com



Ledges against windows



Daddi Long Legs®

- Pressure light to Medium
- Target Species- Pigeons and Gulls
- Installation-Easy!!!
- Platform protection



Daddi Long Legs®



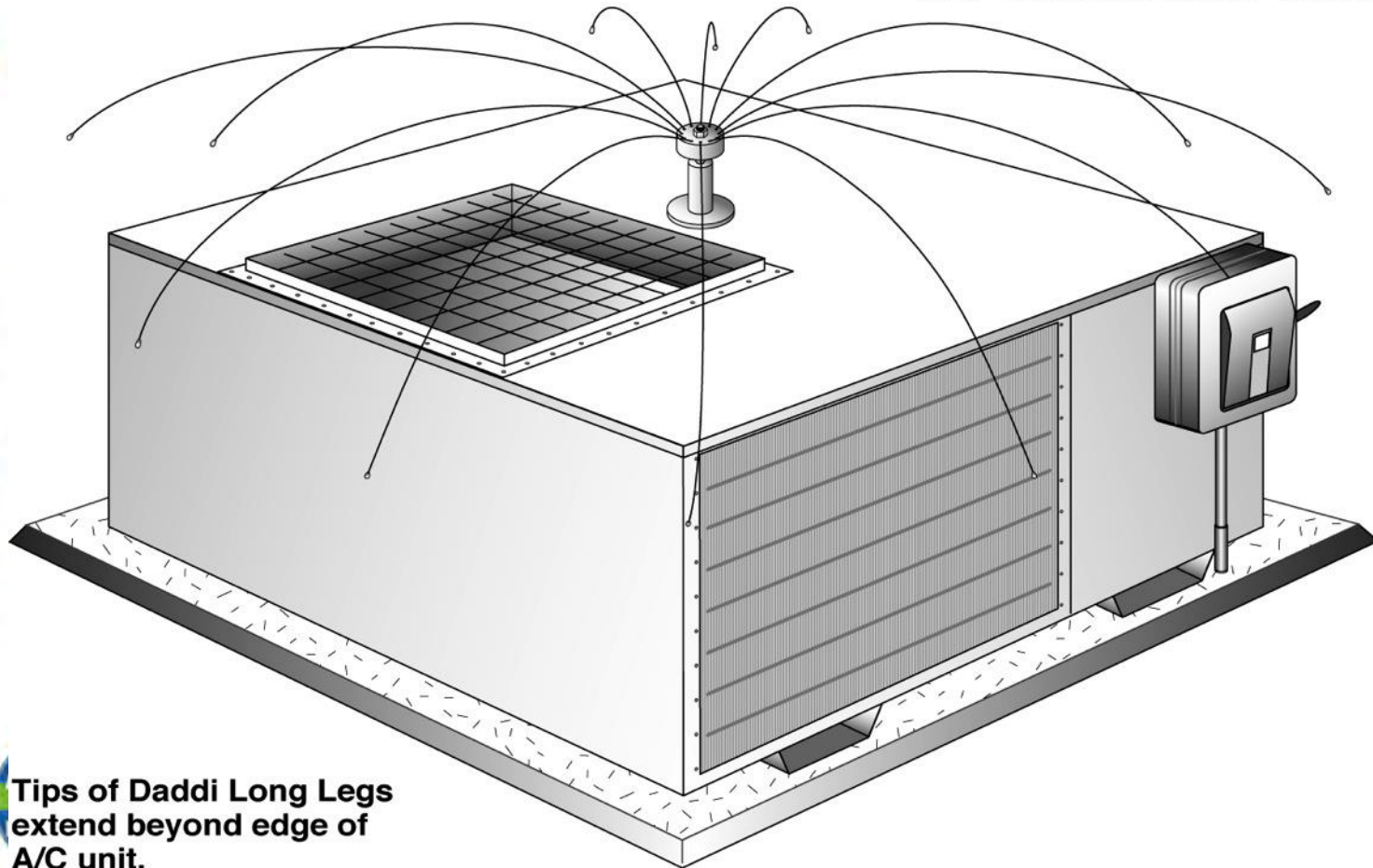
800-NO-BIRDS

www.BirdBarrier.com



Installation

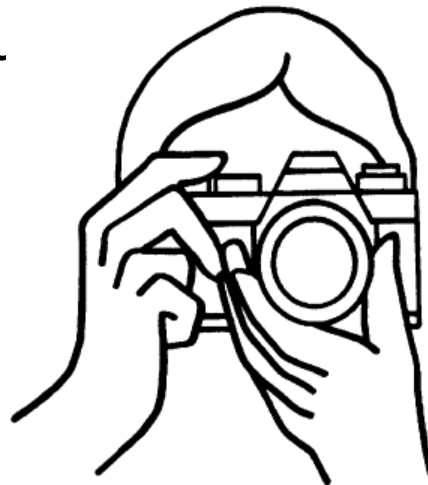
Daddi Long Legs on Air Conditioner Unit



Tips of Daddi Long Legs extend beyond edge of A/C unit.

Photos

- Send photos & Addresses to **Bird Barrier** for support
- Include in proposal
 - Decision maker may be in another city
- Take “after” photos
 - Have before & after photos of your own jobs for brochures, magazine, rag book, etc.





PEST INVASION 2014

PREMIER FOOD INDUSTRY PEST MANAGEMENT SEMINAR



Thank You!

