

VECTOR FOG

OPTICAL GEL BIRD REPELLENT

ADVANCED FORMULA



User Instructions

Net Weight : 8.82oz (250g)



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Made in Korea

Product Information – Advantages of “Vectorfog Optical Bird Repellent”

- “Vectorfog Optical Bird Repellent” is a patented, non-toxic, eco-friendly innovation that effectively drives unwanted urban birds away without harming them. It’s technology is light years ahead of its competitors. Ultrasonic repellents, visual scare, spike needles and bird nets are some examples of conventional bird repellents. Conventional bird repellents stimulate only one sense of the birds and hence have limited efficacy as efficacy decreases considerably through time due to birds’ acquired learning abilities.
- Harmless to Birds. Through the years, many chemical bird repellents have come and gone, partly due to lack of effectiveness, but also because of adverse health side-effects. The main ingredients in “Vectorfog Optical Bird Repellent” are listed in US FDA’s GRAS (Generally Recognized As Safe) list, a designation that a chemical or substance added to food is considered safe by experts. Using Oriental Herbal ingredients “Vectorfog Optical Bird Repellent” stimulates Visual , Odor, irritating touch feel. Distinct mode of action of instantaneous bird rejection response through simultaneous smell, sight, and irritation.
- Economical way of repelling birds. “Vectorfog Optical Bird Repellent” has long lasting efficacy with no damage to buildings and facilities. Oriental Herbal contained in the gel forms a film that prevents water from penetrating or evaporating from the ingredients. “Vectorfog Optical Bird Repellent” can last 12~24 months if left undisturbed after proper installation. It does not need to be re-applied every 3~6 months, typical of gel alternatives that rely on sticky gel to trap birds which is an inhumane method of bird control. Does not kill or trap birds. Instantaneously changes bird behaviors so that they fly somewhere else.
- Use “Vectorfog Optical Bird Repellent” under various climate conditions. “Vectorfog Optical Bird Repellent” is stable, even when there wide variations of temperature, wind, rain and snow. It’s non drying formula will last a long time. (12-24 months)
- Use “Vectorfog Optical Bird Repellent” anywhere (follow the instructions carefully) “Vectorfog Optical Bird Repellent” can be used anywhere- urban, rural, indoors, outdoors. Places include ports, airports, electrical and telecom poles, upper part of water tanks, wood, signboards, railroads, warehouses, parking lots, public buildings, stadiums, and many other locations where birds are a hazard. Install “Vectorfog Optical Bird Repellent” easily. Installation of “Vectorfog Optical Bird Repellent” is easy. Our instruction manual will guide you how to apply the product.
- Effortless cleaning after application of “Vectorfog Optical Bird Repellent”
Remove the used dishes and treat it as a pesticide disposal. In case of direct application or contact, remove product from person and application equipment by using soap and water. Clean treated surfaces by removing tape (if used) and by scraping off product and clean with disposable cloth soaked in soap and water. Wear appropriate skin and respiratory protection when performing these tasks.

PRECAUTIONARY STATEMENTS

REPELS MOST TYPES OF UNWANTED BIRDS FROM BUILDINGS, FACILITIES AND ADJACENT STRUCTURES WHEN APPLIED ACCORDING TO THESE INSTRUCTIONS.

(Telecom Poles, Electrical Power Structures, Bridge Beams, Marine Structures, Ornamental Copings, Sign Boards, Residence Balconies, Roof Lines, Windowsills, Cornices & Ledges, Gutter Edges, etc.)

- “Keep Out of Reach of Children” at all times
 - Harmful if absorbed through skin for prolonged period. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield and gloves. Wash thoroughly with soap and water after handling.
 - Remove contaminated clothing and wash clothing before reuse.
 - Eco friendly does not mean that Small birds may not become fatally entrapped by this tacky repellent, To reduce hazards for legally protected species, and to avoid noncompliance with the Federal Migratory Bird Treaty Act, follow all instructions carefully.
- For Use- Keep out of lakes, ponds, and streams. Do not contaminate water sources by cleaning equipment or disposing of wastes that do not comply with pesticide disposal rules and regulations.
- To reduce potential exposure to bird-related diseases, wear waterproof gloves and a respirator approved by the U.S. Bureau of mines for dust protection when cleaning areas to be treated. Prepare surfaces to be treated by removing bird nests, dirt, droppings and other debris. Using water mixed with a wetting agent or detergent, wet surfaces where droppings are present to limit generation of airborne dust during cleaning. Allow cleaned surfaces to dry fully prior to treatment as adhesive silicon or the repellent may be poor on wet surfaces.

CLEAN-UP : Remove the used dishes, hangers and treat it as you would for pesticide disposal. Wear appropriate skin and respiratory protection gear when performing these tasks. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

STORAGE AND DISPOSAL : Do not contaminate water, food or feed by storing or disposing in places that prohibit such uses.

STORAGE : Store in an area inaccessible to children and pets. Do not store near food or feed. Do not store in an environment which will corrode the plastic cartridge. Any leaking cartridge should be disposed of (as directed below).

PESTICIDE DISPOSAL : Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL : If empty, do not reuse this container. Place in the trash or offer for recycling if available.

IF PARTLY FILLED : Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Product



Bird Repellent



Nozzle



Plastic dishes (15ea)

Mounting Method of “Vectorfog Optical Bird Repellent”

15 Plastic dishes are shipped with each cartridge of “Bird Free”. Additional dishes or the special magnets for mounting for metal Surfaces can be purchased separately.

1. PREPARING SURFACES FOR TREATMENT



- Prepare the area for installation by cleaning up bird nests, dirt, droppings, excrement, etc
- If the cleaning process is not done properly, the effectiveness of the product cannot not be ensured

2. Apply the Adhesive silicon on the bottom of dishes



- Apply the silicon on the bottom of dish
- *Other products such as double-sided sticky tape or special magnets can be attached to mount the dishes onto the surfaces. Special Magnets are sold

3. Attach the Dish Into Position -Attach the dish on the Area damaged by the birds



- *Attach at intervals of **7 inches –20 inches apart** (10 cm ~ 50 cm) depending on the degree of bird damages

=> refer to the “Installation Guide of “Bird Free”. Based on the Living Environments of Birds”

*Habitat Area: **4 inches –6 inches** (10 cm ~ 15 cm)*Semi-Habitat Area: **8 inches –10 inches** (20 cm ~25cm)*Resting Place or Activity Area: **12 inches –20 inches** (30 cm ~50cm)

3. Attach a Nozzle on the Top of the Cartridge

- cut the stopper on the cartridge
- (Do not cut the nozzle)
- Attach the nozzle to the cartridge by screwing nozzle clockwise



5. Latch the Cartridge in the Caulking Gun

- Latch the cartridge in the caulking gun

6. Inject the Product on the Dish

- Inject **0.53oz –0.70oz** (15~20g) on each supplied plastic dish
- An ample amount of the product on the dish will be about **0.53oz**(15g)







*If it's difficult to place the dishes on surfaces, “Bird Free”. can be applied directly in a circular form on the surface. However, refer to the “Installation Guide of “Bird Free”. Based on the Living Environments of Birds.”





[Installation Example]



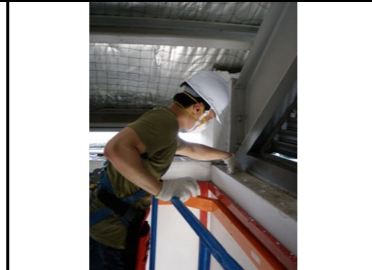

• Preparation Stage: Items of Consideration

Boom lift (Crane) High Pressure Water Spray, Secateurs, Silicon Gun, Silicon (Clear Colour), Dust Mask, Cable Ties, Thin Rope(3mm), Long Tape Ruler, Plastic Broom, Mop, Garbage Bag, Bucket (with Water), Cleaning Brush, Scraper, Safety Bar, Safety Belt, Gloves, Safety Hat, Safety Boots, Safety Signs, LadderEtc.



1. Unload Product	2. Prepare Boom lift	3. Prepare Water Spray	4. Open Product by using
			





5. Screw in the Nozzle	6. Attach to silicon Gun	7. Load to Boom Lift	8. Put on Hard Hat, Mask, Safety Belt and Tools (1Group / 2 Person)
			

9. Clean the Area Using Pressure Spraying and Broom	10. Gun Silicon putty where dishes will be Attached	11. Attach Dishes	12. Dishes Being Set
			

Cleaning is the MOST IMPORTANT STEP, make sure all bird droppings and nests are removed.

Make Sure Dishes are Attached Firmly.

The Distance should depend on the bird types and Concentration of birds. The more birds there are the closer the dishes should be. And the distance should be less than the bird's wingspan.

13. Unload Product Onto the Dishes	14. Products Are in Place on the Dishes	15. Apply Directly to the Surface	16. Direct Application Onto the Surface
			

Fill the dishes full of the product and make sure it does not spill.

Notice the product dishes are installed near the edges of the beam and not towards inner side of it.

On Areas between the dishes you can apply the product Directly onto the surface. The product does not solidify over time, so it is easy to remove the gel.

On areas where it is difficult to attach the dishes you can apply the product directly onto the surface instead.

17. Finished Area	18. Finished Area	19. Cleanse the Floor with Water	
			

Installation Guide of "Bird Free" Based on the Living Environments of Birds

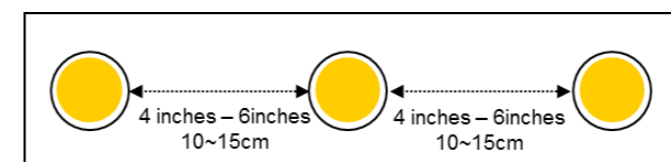
Habitats (Nesting and Hatching places) Characteristics

- On average, the size of the habitat length is about 20 inches (50cm) horizontally and in height.
- These roosting areas are more stimulating to birds that have a keen sense of contact rather than sight or smell (due to their strong homing instincts). Therefore, the spacing of these repellents should be about 4 inches – 6 inches (10 ~ 15cm) apart.
- A recommendation: if it's difficult to set the dishes, "Bird Free" can be installed directly onto the surface in a circular formation as illustrated below on the right. The amount should be the same as if it were placed on the dishes, about 0.53oz- 0.70oz (15-20g) for each dish.
- If the repellent is to be applied directly onto the surface, check the condition of the surface where the repellent is to be applied.

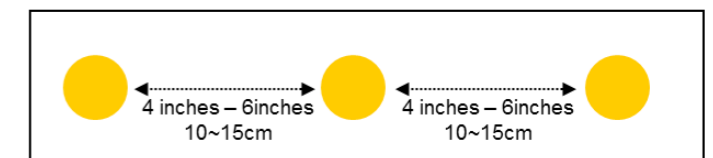
Treat porous surfaces such as wood, stone, or concrete with an undercoating such as paint or sealer before applying the "Bird Free"

Repellent. On asphalt or wood shingles, or on any other surface from which relatively easy removal of the product is desired, apply

waterproof tape or similar materials first and then apply the repellent to the tape rather than its substrate.



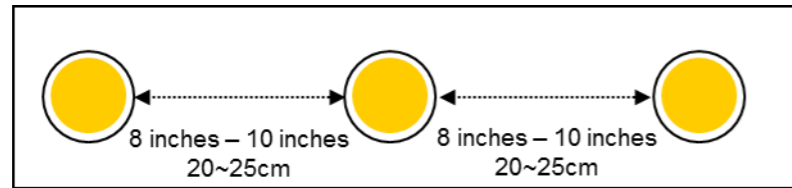
[Installation Spacing in Habitats] Recommended



[Installation spacing without dishes] Not Recommended- Apply only when absolutely needed.

Semi-Habitat Characteristics (Sleeping areas, Places Birds go to Avoid the Cold Weather, Direct Sunlight or Rain)

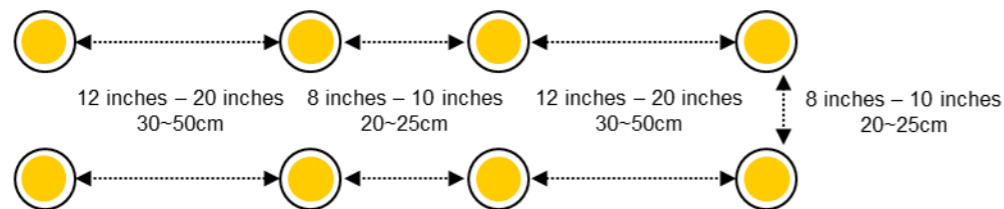
- Usually it is a small space that only birds can access, such as terraces, outdoor units, window frames the size of 3.3 m².
- This is a pre-stage habitat which might become the bird's habitat later.
- The recommended installation spacing of dishes are about 8 inches – 10 inches (20 ~ 25cm) apart.
- It is important to block these areas in advance using other methods, since they're great places for birds to live in and can eventually become a habitat.



[Installation Spacing in Semi-Habitats]

Characteristics of Places for Rest and Activity (Easy and Spacious to Find Things to Eat and Find Predatory Enemies)

- These places are very diverse in form: roof tops, the roof itself, the upper regions of buildings, window sills, roof lines, gutter edges, signs, ornamental copings, cornices, ledges, and similar surfaces.
- These places can have a collective of big bird population sizes, especially areas distributed with wide spaces.
- Birds roost at the top or edge of roofs.
- In order to prevent the birds from gathering, a recommended installation interval is 8 inches – 10 inches (20 ~ 25cm) for this area and 12 inches – 20 inches (30 ~ 50cm) in other areas.
- After "Bird Free" installation, the birds will avoid gathering together in groups.



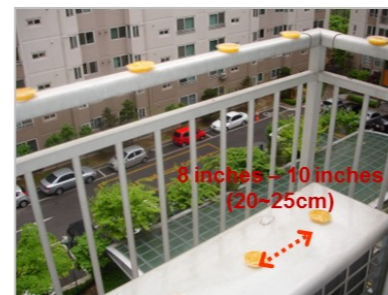
[Installation Spacing in Place For Rest and Activity]

Precautionary Statement: Please Be Careful to Not Fall While installing the Repellent.

Examples of Installation in General Structure Facilities.

Outdoor Air Conditioning Unit in Apartments (Habitat, Semi-Habitat)

1. Installation
 - Basic cleaning (dusting and washing)
 - Place dishes 4 inches ~ 6 inches (10~15cm) apart in the habitat Area
 - Place Dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat Area
2. Inject the Product Onto the Dishes.
 - Injection of about 0.53oz(15g) per Dish



Precautionary Statement: Please Be Careful to Not Fall While installing the Repellent.

Roof Floor and Roof Top of a High School (Semi-Habitat and Resting Place)

1. Installation
 - Basic cleaning (dusting and washing)
 - Place dishes 8 inches – 10 inches (20~25cm) apart in semi-habitat area (At the top and edge of the roof)
 - Place dishes 12 inches – 20 inches (30~50cm) apart in resting areas (Places besides semi-habitat)
2. Inject the product onto the dishes.
 - Injection of about 0.53oz (15g) per dish



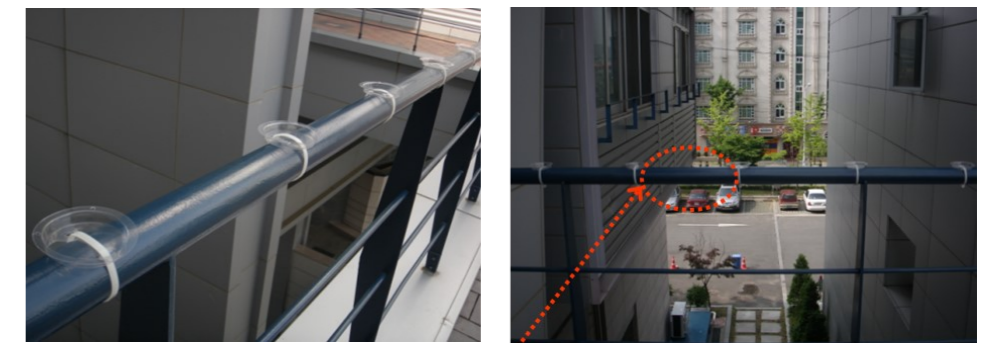
Window Frames at a University (Semi-Habitat)

1. Installation
 - : Basic cleaning (dusting and washing)
 - : Place dishes 8 inches – 10 inches (20~25cm) apart in the semi-habitat areas (At the top and edge of roof)
2. Inject the product onto the dishes.
 - : Injection of about 0.53oz (15g) per dish



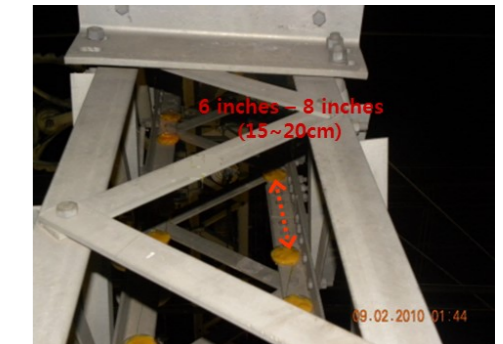
Handrail (Resting Place)

1. Installation
 - : Basic cleaning (dusting and washing)
 - : Place dishes 12 inches – 20 inches (30~50cm) apart in resting places with cable ties (At the top and edge of the handrail)
2. Inject the product onto the dishes.
 - : Injection of about 0.53oz (15g) per dish



Beam Structure (Habitat, Semi-Habitat)

- Daegu Metropolitan Transit Corporation, DTRO
1. Installation
 - Basic cleaning (dusting and washing)
 - Place dishes 4 inches ~ 6 inches (10~15cm) apart in the habitat Areas
 - Place Dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat Areas
 2. Inject the product onto the special magnets.
 - Injection of about 0.88oz(25g) per Dish
- MAGNETIC DISHES



Precautionary Statement: Please Be Careful to Not Fall While installing the Repellent.

Incheon Port Authority (Habitat, Semi-Habitat)

1. Installation
 - Basic cleaning (dusting and washing)
 - Place dishes 4 inches ~ 6 inches (10~15cm) apart in the habitat Areas
 - Place Dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat Areas



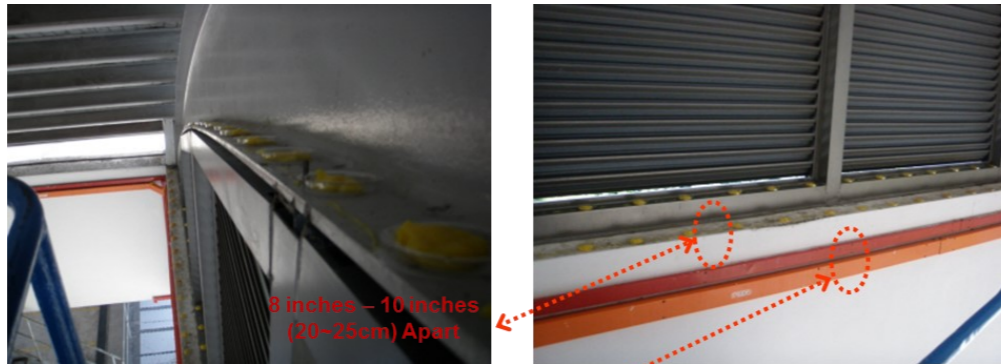
Incheon Customs Container Center (Habitat, Semi-Habitat)

1. Installation
 - : Basic cleaning (dusting and washing)
 - : Place dishes 4 inches ~ 6 inches (10~15cm) apart in habitat Areas
 - : Place Dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat Areas
2. Inject the product onto the Dishes.
 - : Injection of about 0.53oz(15g) per



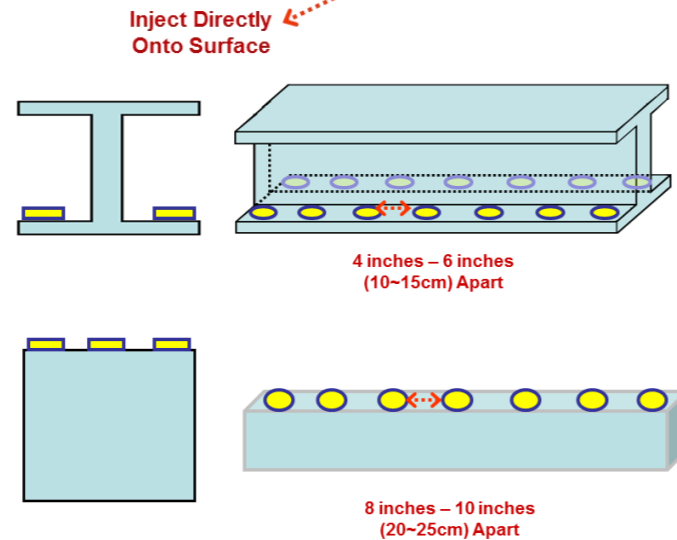
Beam in the Cargo Quarantine Area (Semi-Gabitat)- Singapore

1. Installation
 - : Basic cleaning (dusting and washing)
 - : Place dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat area.
2. Inject the product onto the dishes.
 - : Injection of about 0.53oz(15g) per dish
3. Inject directly on the surface in case of limited space



Beam Habitat, Semi-Habitat

1. Installation
 - Basic cleaning (dusting and washing)
 - Place dishes 4 inches ~ 6 inches (10~15cm) apart in the habitat Area
 - Place Dishes 8 inches ~ 10 inches (20~25cm) apart in the semi-habitat Area (At the edge of beam)
2. Inject the product onto the Dishes.
 - Injection of about 0.53oz(15g) per Dish

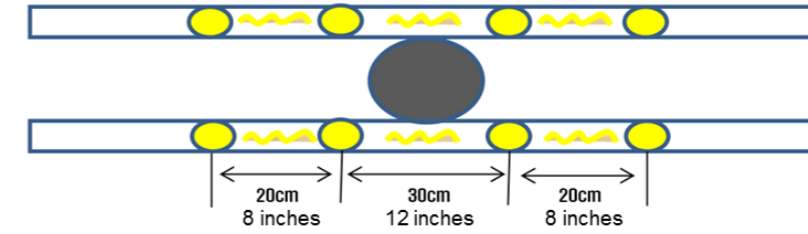


Precautionary Statement: Please Be Careful to Not Fall While Installing the Repellent. Also For Electrical installations Only Authorized Personnel Should Install the Repellent. Electrical Shock and Electrocutation Can Cause Death.

Installation Guide in Electricity Facilities

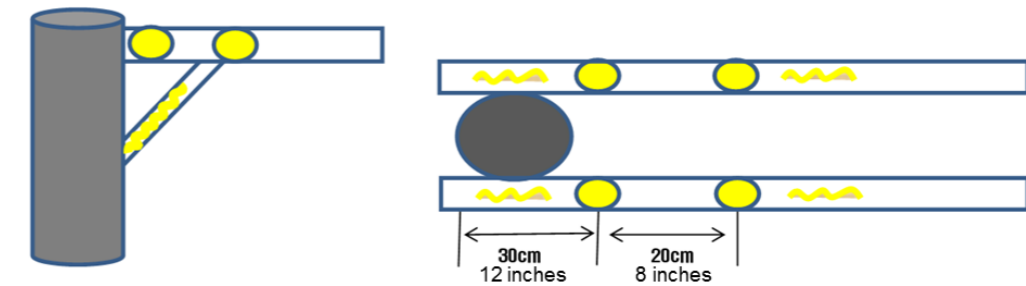
Installation of Dual Iron Structures on Top of an Electrical Pole.

1. Fill the dish attached with the magnet with the product of 0.88oz – 1.41oz (25g~40g) and attach it to the iron structure. Note: Magnets sold separately.
2. Inject the product in length of 6 inches(15cm) with a width of 0.39 inches(1cm) onto the surface directly as shown in the illustration.



Installation of Single Iron Structure on an Electrical Telecom Pole

1. Fill the dish with the product of 0.88oz – 1.41oz (25g~40g) and attach it to the iron structure.
2. Inject the product in length of 6 inches (15cm) and a width of 0.39 inches (1cm).
3. Inject the product onto the supporting beam as well as in length of 12 inches (30cm) and a width of 0.39 inches (1cm) to the surface directly as shown in the illustration below.



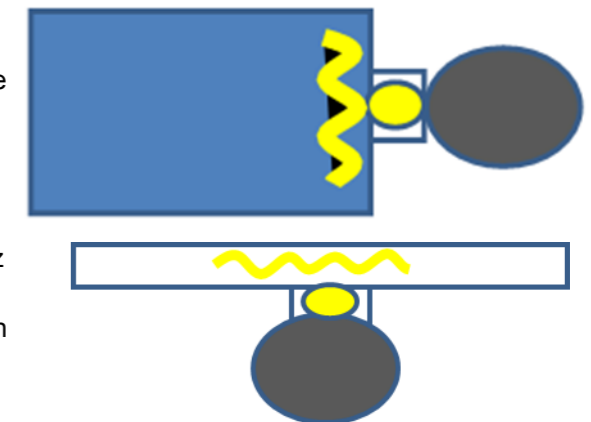
Installation on Top of Transformers

Fill the dish attached to the magnet with the product of 0.88oz – 1.41oz (25g~40g) and attach it to a hanger band (top, bottom) magnets sold separately. If the magnets attach to the top cover of the transformer, attach two of them inside the telecom pole in 8 inch (20cm) intervals. If not, inject the product in length of 12 inches (30cm) and width of 0.39 inches (1cm) on to the surface directly as shown in the illustration.



Installation of Transformers and Other Equipment (Gas Insulated Switchgear Load, Auto Circuit Breakers, etc.)

Fill the dish attached to the magnet with the product of 0.88oz – 1.41oz (25g~40g) and attach it to bottom of the hanger band. If the magnet does not attach to the top cover of the equipment, inject the product in length of 12 inches (30cm) and a width of 0.39 inches (1cm) onto the surface directly (As shown in illustration).



Installation of “ㄱ” Shape of Single Iron Structure

Fill the dish attached to the magnet with the product of 0.88 oz – 1.41 oz (25g~40g) and attach it to the metal beam structure. If the magnet does not attach to the structure, inject the product in length of 20 inches (50cm) and a width of 0.39 inches (1cm) onto the surface directly (as shown in illustration).