# **SECTION 10 81 13**

# **BIRD CONTROL DEVICES**

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1.01	SUN	SUMMARY			
	A.	Section Includes: Bird control devices at locations at indicated on the Drawings.			
	B.	Related Sections: 1. [].			
1.02	REF	REFERENCE STANDARDS			
	A.	[].			
1.03	ADMINISTRATIVE REQUIREMENTS				
	A.	Coordination: Coordinate as required with installation of related work.			
	B.	[Preinstallation Meeting: ]			
	C.	[Sequencing:]			
	D.	<ul><li>[Scheduling:</li><li>1. [Schedule installation of bird wire system to occur after adjoining work is completed including installation of sealant systems.]</li></ul>			
1.04	[SU	USTAINABLE CHARACTERISTICS]			
	A.	Section 01 35 63 - Sustainability Project Requirements: Requirements for sustainable design compliance.			
	B.	Materials and Resources Characteristics:  1. [Recycled Content Materials: Furnish materials with maximum available recycled content including:			
SPEC	NOT				
SPEC	: NОТ	2. [Regional Materials: Furnish materials extracted, processed, and manufactured within 500 miles of Project site.]			
		a. []			
1.05	SUE	MITTALS			
	A.	See Section 01 33 00 - Submittal Procedures, for submittal procedures.			
	B.	Product Data.			
	C.	Shop drawings at large scale showing construction, thickness of metal, profiles, and anchorage.			

D. Samples:

1. [Bird Control Strips: Minimum 6 inch long sample.]

- 2. [Bird Wire System: Full size samples of each type base with posts with attached wire.]
- 3. [Bird Netting: Four foot square sample of netting with edge construction and each accessory item.]
- 4. Other Samples only as requested.

# 1.06 [SUSTAINABLE DESIGN SUBMITTALS]

- A. Section 01 35 63 Sustainability Project Requirements: Requirements for sustainable design submittals.
- B. Manufacturer's Certificate: Certify products meet or exceed specified sustainable design requirements.
  - Materials Resources Certificates:
    - a. Certify source and origin for [salvaged] [and] [reused] products.
    - b. Certify recycled material content for recycled content products.
    - c. Certify source for regional materials and distance from Project site.
- C. Product Cost Data: Submit cost of products to verify compliance with Project sustainable design requirements. Exclude cost of labor and equipment to install products.
  - 1. Provide cost data for the following products:
    - a. [Salvage products.]
    - b. [Reused products.]
    - c. Products with recycled material content.
    - d. Regional products.

# 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle packaged materials in original containers with seals unbroken and labels intact until time of use.
- B. Store delivered products in clean, safe, dry area.

# **PART 2 PRODUCTS**

#### 2.01 BIRD CONTROL STRIPS

- A. Description: Type 302 Stainless steel needle-sharp points, 120 points per foot welded to a 1/4 inch flexible base strip; approximate 3-3/4 inch wide by 3-1/2 inch high by length as required; provide stainless steel RB clips, stainless steel screws, neoprene washers, and adhesive.
- B. Product: Nixalite of America's "L53 Nixalite Needle Strips, Mounting Hardware and Adhesive"; or equal.

### 2.02 BIRD WIRE SYSTEM

- A. Description: Spring-tensioned wire attached to posts.
  - 1. Wire: Seven strand, stainless steel wire, coated with clear ultra-violet stabilized nylon.
  - 2. Base with Posts: Stainless steel, base size indicated on the Drawings, number of post per base and height of posts as indicated on the Drawings, design base for glue-on installation.
  - 3. Glue: As recommended by manufacturer of Bird Control system.
  - 4. Spring: Stainless steel, size as required.
  - 5. Crimps: Nickel plated copper.

B. Product: Bird Barrier America, Inc.'s; "Birdwire System"; Bird-B-Gone, Inc.'s "Bird Wire 2000 System"; or equal.

#### 2.03 BIRD NETTING SYSTEM

### A. Netting:

- 1. Description: Knotted netting made of strong cable twine.
  - a. Material: High-density, ultra-violet stabilized polyethylene plastic twine.
  - b. Construction: 3 by 2 ply; three groups of two stands wrapped into tight, rope-like group of six.
  - c. Mesh Size: 1-1/8 inches.
  - d. Breaking Strength: 41 pounds per strand.
  - e. Softening Point: In region of 250 degrees Fahrenheit.
  - f. Melting Point: In excess of 270 degrees Fahrenheit.
  - g. Burns with difficulty, flame will not spread.
  - h. Color: Black.
  - Plastic molded netting is not acceptable.
- 2. Product: Bird Barrier America, Inc.'s; "Bird Barrier StealthNet"; Bird-B-Gone, Inc.'s "Bird Net 2000"; or equal.
- B. Perimeter Cable: 5/64 inch 7 by 7 construction, stainless steel cable.
- C. Turnbuckles: Stainless steel, size as required.
- D. Hog Rings: Stainless steel, size as required.
- E. Multi-Purpose Cable Bracket:
  - 1. Description: Stainless steel bracket to be used as an end or intermediate bracket.
  - 2. Product: Bird Barrier America, Inc.'s "Cable Bracket NI-CB10"; or equal.

### **PART 3 EXECUTION**

#### 3.01 EXAMINATION

- A. Examine areas to receive items and verify that:
  - 1. Dimensions are correct to receive items.
  - 2. Adjacent or adjoining surfaces are clean, dry, reasonably smooth, and free from defects.
  - 3. There is absence of other conditions that will adversely affect installation.
- B. Do not start work until unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. Install bird control devices in accordance with manufacturer's recommendation and reviewed Shop Drawings.
- B. Bird Control Strips: Install bird control strips where noted with fasteners at each end of each bird control strip and with adhesive in-between and in accordance with manufacturer's instructions.
- C. Bird Wire:
  - 1. Install bird wire control system where indicated on the Drawings.
  - 2. Number of rows as determined by manufacturer and based on project conditions.
  - 3. Install wire in lengths of no more than 10 feet per section of wire. At maximum of every 10 feet install spring and terminate wire. Next 10 feet of wire can continue from same post.

- 4. Install intermediate support post where indicated on the drawings, maximum spacing of 5 feet.
- 5. Install bases with post with glue. Do not use screws or drill holes into substrates.
- 6. Allow glue to thoroughly cure before installing wire.

### D. Bird Netting:

- 1. Install bird netting control system on inside face of removable ornamental grilles.
- 2. Install perimeter wire around perimeter of area to receive netting using multi-brackets. Tension wire with turnbuckles.
- 3. Attach netting to perimeter wire with hog rings or crimping as recommended by netting manufacturer. Space attachment at maximum of 3 feet.
- 4. Install netting "tight-as-a-drum". Loose installation will be rejected.
- Use only mechanical type attachments or fasteners. Do not use adhesive or Velcro type attachments or fasteners.

# 3.03 PROTECTION

- A. Protect work from damage to surface, profile, and shape.
- B. Replace damaged items.

**END OF SECTION**