

## Aerial Self-Support Duct Hardware



### 1. Scope

This standard covers the requirements for a variety of products related to Figure-8 aerial self-support duct.

This standard applies to the following Seattle City Light (SCL) stock numbers:

<b>Stock No.</b>	<b>Description</b>
012258	Coupler, aerial self-support duct
014267	Clamp, serpentine, 1/4-in messenger
010314	Clamp, serpentine, 3/8-in messenger
012257	Clamp, bonding/grounding
010313	Standoff bracket, communications

### 2. Application

Self-support duct provides aerial placement of fiber optics, coaxial cables and other types of utility cables. The products cited in this standard provide the means to attach aerial self-support duct to wood poles and other structures. See also SCL 5650.30, "Deadend, Guy, Aluminum Automatic Feed-Through" and SCL 7140.25, "Aerial Self-Support Duct."

In 2017, SCL transitioned from self-support duct with 3/8-in strand (Stock No. 010312) to duct with 1/4-in strand (Stock No. 014266).

Standards Coordinator  
Todd Oki

Standards Supervisor  
John Shipke

Unit Director  
Andrew Strong

Aerial self-support duct with 1/4 in strand shall be used for pole to pole spans of less than 225 ft. For spans of greater than 225 ft but less than 400 ft, the use of All Dielectric Self Supporting (ADSS) cable or aerial self-support duct with 3/8 in strand shall be used. For spans of greater than 400 ft, detailed pull and sag calculations are required.

When aerial self-support duct with 3/8-in strand is no longer available, 3/8-in messenger shall be used with fiber optic cable lashing directly to the messenger.

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### 3. Requirements

#### 3.1 Coupler, Stock No. 012258



Coupler shall be designed to join 1-1/4-in SIDR 9, figure 8, self-support duct.

Coupler shall be designed to make a waterproof seal.

#### 3.2 Clamps, Serpentine, Stock Nos. 014267 and 010314



Clamps shall be designed for maximum gripping strength without the removal of the strand jacket.

Clamps shall be hot-dipped galvanized steel.

Clamps shall be provided with two fasteners loosely assembled.

Clamp, Stock No. 014267, shall be designed for use with 1/4-in strand.

Clamp, Stock No. 010314, shall be designed for use with 3/8-in strand.

### 3.3 Clamp, Bonding/Grounding, Stock No. 012257

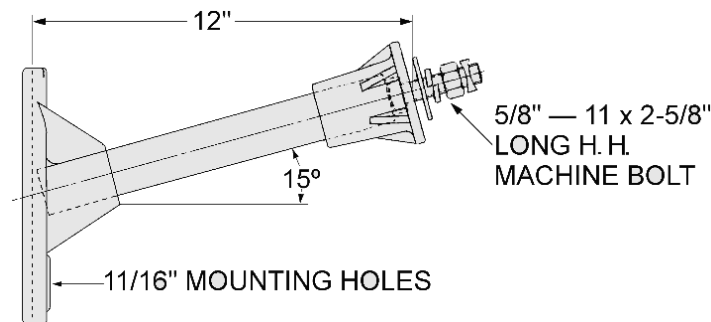


Clamps shall be designed to make electrical connection without removing the strand jacket (sheath).

Clamps shall be designed with breakaway torquing nuts that allow for a solid bond (connection) without damaging the strand.

Clamps shall be designed for use with either 1/4-in or 3/8-in strand.

### 3.4 Standoff Bracket, Stock No. 010313



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## 4. Packaging

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity contained

Each shipping container shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL purchase order number
- SCL stock number

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## 5. Issuance

Stock unit: EA

## 6. Approved Manufacturers

Stock No.	Description	Manufacturer	Catalog No.
012258	Coupler, aerial self-support duct	Etco	DEL-154UV
014267	Clamp, serpentine, 1/4-in messenger	Coastal Line Products	70350025
010314	Clamp, serpentine, 3/8-in messenger	AD Technologies	1-907017
012257	Clamp, bonding/grounding	Electric Motion Company (EMC)	EM 5007-1
010313	Standoff bracket, communications	Hubbell Power Systems MacLean Power Systems	1CSM12 G1MDA112AFX

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## 7. References

**SCL Material Standard 5650.30**; Deadend, Guy, Aluminum Automatic Feed-Through  
**SCL Material Standard 7140.25**; Aerial Self-Support Duct

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## 8. Sources

**Fairchild, Ryan**; SCL Communications Engineer and subject matter expert for 7141.25  
(ryan.fairchild@seattle.gov)

**Kim, Sung**; SCL Communications Supervisor and subject matter expert for 7141.25.  
(sung.kim@seattle.gov)

**Shipek, John**; SCL Standards Supervisor and originator of 7141.25  
(john.shipek@seattle.gov)