Decorative Streetlight Poles, Aluminum, Anchor Base

1. Scope

This standard covers the requirements for 4-inch decorative aluminum anchor-base streetlight poles and decorative pole base covers.

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

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>013422</td>
<td>Pole, 14-ft mounting height, fluted shaft</td>
<td>Black</td>
</tr>
<tr>
<td>013423</td>
<td>Pole, 14-ft mounting height, fluted shaft</td>
<td>Light gray</td>
</tr>
<tr>
<td>013424</td>
<td>Pole, 14-ft mounting height, fluted shaft</td>
<td>Dark green</td>
</tr>
<tr>
<td>013425</td>
<td>Pole, 14-ft mounting height, round shaft</td>
<td>Black</td>
</tr>
<tr>
<td>013426</td>
<td>Pole, 14-ft mounting height, round shaft</td>
<td>Light gray</td>
</tr>
<tr>
<td>013427</td>
<td>Pole, 14-ft mounting height, round shaft</td>
<td>Dark green</td>
</tr>
<tr>
<td>014248</td>
<td>Base cover, short shroud</td>
<td>Black</td>
</tr>
<tr>
<td>014249</td>
<td>Base cover, short shroud</td>
<td>Light gray</td>
</tr>
<tr>
<td>014250</td>
<td>Base cover, short shroud</td>
<td>Dark green</td>
</tr>
<tr>
<td>014251</td>
<td>Base cover, tall shroud</td>
<td>Black</td>
</tr>
<tr>
<td>014252</td>
<td>Base cover, tall shroud</td>
<td>Light gray</td>
</tr>
<tr>
<td>014253</td>
<td>Base cover, tall shroud</td>
<td>Dark green</td>
</tr>
</tbody>
</table>
2. Application

Decorative streetlight poles are powder-coated. The color is specified by the streetlight engineer to match the color of the streetlight luminaires, which varies by installation location.

Decorative streetlight poles are installed onto 4-bolt, 9-inch bolt-circle streetlight pole foundations, SCL Stock No. 568025.

Decorative streetlight poles are installed with a decorative base, which is ordered separately. Decorative base shall match the finish of the pole. See Sections 7.7–7.12.

3. Industry Standards

Decorative streetlight poles shall meet the applicable requirements of the latest revision of the following industry standards:

**AASHTO**: Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals

**ASTM A 153**: Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

**ASTM A 307**: Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

**ASTM B 117**: Standard Practice for Operating Salt Spray Apparatus


4. Requirements

4.1 General

Decorative streetlight poles shall be designed and fabricated to conform to the requirements of AASHTO standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.

Decorative streetlight poles consist of an aluminum shaft welded to an aluminum alloy base with pressure-mounted nut cover discs.
4.2 Shaft

The aluminum shaft shall be made of high-strength, corrosion-resistant 6063 aluminum alloy.

**Fluted Shaft - Stock No. 011969**

<table>
<thead>
<tr>
<th>Cross section</th>
<th>Fluted, 8 or 12 curved sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting height</td>
<td>14'</td>
</tr>
<tr>
<td>Pole-top diameter, outside</td>
<td>4&quot; ± 1/8&quot;</td>
</tr>
<tr>
<td>Base diameter, outside</td>
<td>4&quot; ± 1/8&quot;</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.125&quot;</td>
</tr>
</tbody>
</table>

Taper: None

**Round Shaft - Stock No. 011971**

<table>
<thead>
<tr>
<th>Cross section</th>
<th>Round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting height</td>
<td>14'</td>
</tr>
<tr>
<td>Pole-top diameter, outside</td>
<td>4&quot; ± 1/8&quot;</td>
</tr>
<tr>
<td>Base diameter, outside</td>
<td>4&quot; ± 1/8&quot;</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.125&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>None</td>
</tr>
</tbody>
</table>

4.3 Grounding

A tapped grounding pad equipped with either a 1/4-20 x 1/2 or 3/8-16 x 1 stainless-steel screw shall be provided and located on the interior of the pole opposite the handhole or directly adjacent to the handhole.

4.4 Handhole

<table>
<thead>
<tr>
<th>Size, min</th>
<th>3&quot; w x 5&quot; h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish/color</td>
<td>Match pole finish/color</td>
</tr>
<tr>
<td>Location</td>
<td>Centered 18&quot; above base</td>
</tr>
</tbody>
</table>

The handhole shall be reinforced so as to result in no loss of shaft strength. The handhole shall have a vandal-proof aluminum cover painted to match the pole color and attached with stainless-steel screws. The aluminum cover shall be weatherproof. If locating the handhole 18 inches above the base would adversely affect the strength of the pole, the handhole may be centered at a maximum height of 30 inches above the base of the pole.

4.5 Pole Base Plate

Base plates shall not be hinged. Base plate shall be sized to accommodate four 3/4-inch anchor bolts spaced 90 degrees apart on a 9-inch bolt circle. Tamper-resistant aluminum nut cover discs shall be included. Base plate shall be compatible with base cover (SCL Stock No. 011975).
4.6 Fixture Mounting

Decorative streetlight poles shall be designed to support pole-top-mounted luminaires.

4.7 Finish

The finish shall be a powder coating with a minimum thickness of 100 microns and shall meet spray requirements of ASTM B 117 and the humidity resistance requirements of ASTM D 2247.

Seattle City Light uses the color choices shown in Figure 4.7:

**Figure 4.7. Color Choices**

<table>
<thead>
<tr>
<th>RAL Color Chart Number</th>
<th>Description</th>
<th>Color Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAL9005</td>
<td>Textured Black</td>
<td><img src="image" alt="Textured Black" /></td>
</tr>
<tr>
<td>RAL7035</td>
<td>Textured Light Gray</td>
<td><img src="image" alt="Textured Light Gray" /></td>
</tr>
<tr>
<td>RAL6012</td>
<td>Textured Dark Green</td>
<td><img src="image" alt="Textured Dark Green" /></td>
</tr>
</tbody>
</table>

4.8 Pole-Top Cap

None required.

4.9 Anchor Bolts

None required.

5. Packaging

Decorative streetlight poles shall be protected with a spiral wrapping of heavy waterproof paper for protection during shipping and installation. A rip cord shall be provided for easy removal of the wrapping.

Shipping containers shall be legibly marked with:

- Manufacturer name
- Manufacturer catalog number
- Product description
- Quantity contained
- Seattle City Light stock number.

6. Issuance

EA
7. Approved Manufacturers

7.1 14-foot Fluted, Black Streetlight Pole, Stock No. 013422

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>P-134-C-001-14-BK-TX</td>
</tr>
</tbody>
</table>

*where:*

- **P** = pole
- **134** = type, fluted 4" outer diameter
- **C** = thickness, 0.167"
- **001** = base cover, not included
- **14** = pole height, 14’
- **BK** = color, black
- **TX** = finish, powder coat textured

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Union Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>B99-B590-Y1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Cyclone Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>PD12-14-SA-CP4497-BE34-RAL9005TX</td>
</tr>
</tbody>
</table>

*where:*

- **PD12** = pole, 4-inch, 12 flutes
- **14** = height, 14 feet
- **SA** = anchorage, anchor plate
- **CP4497** = Cyclone project, 4497
- **BE34** = base cover, cast aluminum nut covers
- **RAL9005TX** = color, textured jet black (RAL 9005)

7.2 14-foot Fluted, Light Gray Streetlight Pole, Stock No. 013423

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>P-134-C-001-14-SCRAL7035-TX</td>
</tr>
</tbody>
</table>

*where:*

- **P** = pole
- **134** = type, fluted 4" outer diameter
- **C** = thickness, 0.167"
- **001** = base cover, not included
- **14** = pole height, 14’
- **SCRAL7035** = color, light gray (RAL 7035)
- **TX** = finish, powder coat textured
7.3 14-foot Fluted, Dark Green Streetlight Pole, Stock No. 013424

Manufacturer: Lumec
Catalog Number: P-134-C-001-14-SCRAL6012-TX

where:

P = pole
134 = type, fluted 4" outer diameter
C = thickness, 0.167"
001 = base cover, not included
14 = pole height, 14’
SCRAL6012 = color, dark green (RAL 6012)
TX = finish, powder coat textured

Manufacturer: Union Metal
Catalog Number: B99-B590-Y3

Manufacturer: Cyclone Lighting
Catalog Number: PD12-14-SA-CP4497-BE34-RAL6012TX

where:

PD12 = pole, 4-inch, 12 flutes
14 = height, 14 feet
SA = anchorage, anchor plate
CP4497 = Cyclone project, 4497
BE34 = base cover, cast aluminum nut covers
RAL6012TX = color, dark green, powder coat textured
7.4 14-foot Smooth, Black Streetlight Pole, Stock No. 013425

Manufacturer: Lumec
Catalog Number: APR-4-F-001-14-BK-TX

*where:*

- APR = Pole material, aluminum round
- 4 = diameter, 4”
- F = wall thickness, 0.125”
- 001 = base cover, not included
- 14 = nominal height, 14’
- BK = color, black
- TX = finish, powder coat textured

Manufacturer: Union Metal
Catalog Number: B99-B591-Y1

Manufacturer: Cyclone Lighting
Catalog Number: PA40-14-SA-CP4385-BE34-RAL9005TX

*where:*

- PA40 = pole, 4-inch round
- 14 = height, 14 feet
- SA = anchorage, anchor plate
- CP4385 = Cyclone project, 4385
- BE34 = base cover, cast aluminum nut covers
- RAL9005TX = color, textured jet black (RAL 9005)

7.5 14-foot Smooth, Light Gray Streetlight Pole, Stock No. 013426

Manufacturer: Lumec
Catalog Number: APR-4-F-001-14-SCRAL7035-TX

*where:*

- APR = pole, aluminum round
- 4 = diameter, 4”
- F = wall thickness, 0.125”
- 001 = base cover, not included
- 14 = nominal height, 14’
- SCRAL7035 = color, light gray (RAL 7035)
- TX = finish, powder coat textured

Manufacturer: Union Metal
Catalog Number: B99-B591-Y2
Manufacturer: Cyclone Lighting

Catalog Number: PA40-14-SA-CP4385-BE34-RAL7035TX

*where:*
- PA40 = pole, 4-inch round
- 14 = height, 14 feet
- SA = anchorage, anchor plate
- CP4385 = Cyclone project, 4385
- BE34 = base cover, cast aluminum nut covers
- RAL7035TX = color, textured light gray (RAL 7035)

### 7.6 14-foot Smooth, Dark Green Streetlight Pole, Stock No. 013427

Manufacturer: Lumec

Catalog Number: APR-4-F-001-14-GN8TX

*where:*
- APR = pole, aluminum round
- 4 = diameter, 4”
- F = wall thickness, 0.125”
- 001 = base cover, not included
- 14 = nominal height, 14’
- GN8TX = color, textured dark green (RAL 6012)

Manufacturer: Union Metal

Catalog Number: B99-B591-Y3

Catalog Number: PA40-14-SA-CP4385-BE34-RAL6012TX

*where:*
- PA40 = pole, 4-inch round
- 14 = height, 14 feet
- SA = anchorage, anchor plate
- CP4385 = cyclone project, 4385
- BE34 = base cover, cast aluminum nut covers
- RAL6012TX = color, textured dark green (RAL 6012)
7.7 Decorative Base Covers, Short Shroud, Stock No. 014248

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>B104-BK-TX</td>
</tr>
</tbody>
</table>

**where:**
- B104 = base cover, B104
- BK = color, black
- TX = finish, powder coat textured

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Cyclone Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>CP4646-RAL9005TX</td>
</tr>
</tbody>
</table>

**where:**
- CP4646 = Cyclone project, 4646
- RAL9005TX = color, textured black (RAL 9005)

7.8 Decorative Base Covers Short Shroud, Stock No. 014249

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>B104-SCRAL7035-TX</td>
</tr>
</tbody>
</table>

**where:**
- B104 = base cover, B104
- SCRAL7035 = color, light gray (RAL 7035)
- TX = finish, powder coat textured

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Cyclone Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>CP4646-RAL7035TX</td>
</tr>
</tbody>
</table>

**where:**
- CP4646 = Cyclone project, 4646
- RAL7035TX = color, textured light gray (RAL 7035)

7.9 Decorative Base Covers Short Shroud, Stock No. 014250

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>B104-SCRAL6012-TX</td>
</tr>
</tbody>
</table>

**where:**
- B104 = base cover, B104
- SCRAL6012 = color, textured dark green (RAL 6012)
- TX = finish, powder coat textured

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Cyclone Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>CP4646-RAL6012TX</td>
</tr>
</tbody>
</table>

**where:**
- CP4646 = Cyclone project, 4646
- RAL6012TX = color, textured dark green (RAL 6012)
7.10 Decorative Base Covers Tall Shroud, Stock No. 014251

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>B40-BK-TX</td>
</tr>
</tbody>
</table>

*where:*

- B40 = base cover, B40
- BK = color, black
- TX = finish, powder coat textured

7.11 Decorative Base Covers Tall Shroud, Stock No. 014252

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>B40-SCRAL7035-TX</td>
</tr>
</tbody>
</table>

*where:*

- B40 = base cover, B40
- SCRAL7035 = color, light gray (RAL 7035)
- TX = finish, powder coat textured

7.12 Decorative Base Covers Tall Shroud, Stock No. 014253

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Lumec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number:</td>
<td>B40-SCRAL6012-TX</td>
</tr>
</tbody>
</table>

*where:*

- B40 = base cover, B40
- SCRAL6012 = color, dark green (RAL 6012)
- TX = finish, powder coat textured

8. References

Borek, Tom; SCL engineer, subject matter expert for 5756.09; (tom.borek@seattle.gov)

Chao, Yaochiem; SCL engineer, originator and subject matter expert for 5756.09; (yaochiem.chao@seattle.gov)

Cyclone Lighting; File PD12-CP4497 – SQ_015396, November 21, 2016

Li, Jesse; SCL engineer, subject matter expert for 5756.09; (jessi.li@seattle.gov)

Philips, LUMEC; Pole Technical Information; revision 2010