# Seattle City Light

### Streetlight Poles, Pedestrian, Aluminum, Round, Anchor Base Type



#### 1. Scope

This standard covers the requirements for round aluminum pedestrian streetlight poles.

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

Stock No.	Mounting Height (ft)	Color	Base
014270	14	Satin Al	Fixed
014271	20	Satin Al	Fixed
014272	20	Black	Fixed
014273	14	Satin Al	Hinged

As of 2017, poles with 3-in pole top diameters are obsolete. These include Stock Nos. 013409, 013410, 013411, and 013412.

#### 2. Application

Round pedestrian streetlight poles are used to support post-top style luminaires with a nominal inner diameter opening of 4 inches.

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

Hinged-base poles, Stock No. 014273, are intended for installation on stairways with steep inclines.

Standards Coordinator Yaochiem Chao

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Standards Supervisor John Shipek

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Unit Director Darnell Cola

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#### 3. Industry Standards

Round pedestrian 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 A307**; Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

ASTM B117; Standard Practice for Operating Salt Spray Apparatus

**ASTM D2247**; Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity

#### 4. Requirements

#### 4.1 General

Round pedestrian streetlight poles shall be designed and fabricated to conform to the requirements of AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals.

Round pedestrian streetlight poles shall consist of an aluminum shaft welded to an aluminum alloy base and be complete with pressure-mounted nut cover discs.

#### 4.2 Shaft

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

#### 14-ft Mounting Height – stock numbers 014270 and 014273

Cross section	Round
Mounting height, nominal	14 ft
Pole-top diameter	4 ± 1/8 in
Base diameter	6 ± 1/8 in
Pole length, nominal	13 ft 8 in
Wall thickness, minimum	.125 in
Weight, nominal	31 lb

#### 20-ft Mounting Height - stock numbers 014271 and 014272

Cross section	Round
Mounting height, nominal	20 ft
Pole-top diameter	4 ± 1/8 in
Base diameter	6 ± 1/8 in
Pole length, nominal	19 ft 8 in
Wall thickness, minimum	.188 in
Weight, nominal	60 lb

A tapped grounding pad equipped with a  $1/4-20 \times 1/2$  or  $3/8-16 \times 1$  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

Size, minimum	3 in W x 5 in H
Finish/Color	Match pole finish/color
Location	
nominal	Centered 18 in above base
maximum	Centered 30 in above base

The handhole shall be reinforced so as to result in no loss of shaft strength.

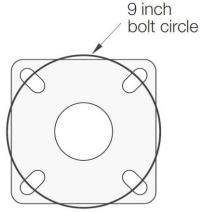
The handhole shall have a vandal-proof aluminum cover painted to match the pole color and attached with stainless-steel screws. The aluminum cover shall be weatherproof.

#### 4.5 Anchor Base Plate

The anchor base plate shall be fixed, except for Stock No. 014273, which shall be hinged.

The anchor base plate shall be sized to accommodate four 3/4-in anchor bolts spaced 90 degrees apart on a 9-in bolt circle. Tamper-resistant aluminum nut covers shall be included.

#### Figure 4.5. Anchor Base Detail



#### 4.6 Fixture Mounting

Round pedestrian streetlight poles shall be designed to support a pole-top mounted luminaries.

#### 4.7 Finish

The outer surface of the pole shall be satin finish aluminum or polyester powder-coated black. Polyester powder coating shall have a minimum thickness of 100 microns. All finishes shall meet spray requirements of ASTM B117 and the humidity resistance requirements of ASTM D2247.

None required.

#### 4.9 Anchor Bolts

None required.

#### 5. Packaging

Round pedestrian streetlight poles shall be individually protected with a spiral wrapping of heavy waterproof material for protection during shipping and outside storage. A method shall be provided for easy removal of the wrapping.

Shipping containers shall be legibly marked with:

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

#### 6. Issuance

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#### 7. Approved Manufacturers

#### 7.1 14 ft Round, Satin Al Streetlight Pole, Stock No. 014270

Manufacturer:		er:	Valmont Industries, Inc.	
Catalog Number:		mber:	R-1308-40-60-4-SBF	
where:				
R	=	cross section, round		
1308	=	nominal mounting height, 14 ft		
40	=	top outer diameter, 4 in		
60	=	base outer diameter, 6 in		
4	=	wall thickness, .125 in		
Т	=	shape of shaft, tapered		
4	=	base or	r mounting, 4-bolt anchor base	
SBF	=	finish, s	satin brushed finish	
Manufacturer:		er:	Union Metal	
Catalog Number:		mber:	163-B26-Y1 Satin	
Manufacturer:		er:	Нарсо	
Catalog Number:		mber:	35021-140 Satin	

#### 7.2 20 ft Round, Satin Al Streetlight Pole, Stock No. 014271

Manufacturer:		er: Valmont Industries, Inc.		
Catalog	g Nui	nber: R-1908-40-60-6-T4-SBF		
where:	where:			
R	=	cross section, round		
1908	=	nominal mounting height, 20 ft		
40	=	top outer diameter, 4 in		
60	=	base outer diameter, 6 in		
6	=	wall thickness, .188 in		
Т	=	shape of shaft, tapered		
4	=	base or mounting, 4-bolt anchor base		
SBF	=	finish, satin brushed finish		
Manufacturer: Union Metal				

Manufacturer:	Нарсо
Catalog Number:	35021-200 Satin

#### 7.3 20 ft Round, Black Powder-Coated Streetlight Pole, Stock No. 014272

Catalog Number: 163-B26-Y2 Satin

Manufacturer:		er: Valmont Industries, Inc.		
Catalog Number:		mber: R-1908-40-60-6-T4-DBL		
where:				
R	=	cross section, round		
1908	=	nominal mounting height, 20 ft		
40	=	top outer diameter, 4 in		
60	=	base outer diameter, 6 in		
6	=	wall thickness, .188 in		
Т	=	shape of shaft, tapered		
4	=	base or mounting, 4-bolt anchor base		
DBL	=	finish, polyester powder-coated black		
Manufacturer:		er: Union Metal		
Catalog Number: 163-B26-Y3 Black Powder-Coated				

Manufacturer:	Нарсо
Catalog Number:	35021-200P1 Black

#### 7.4 14 ft Round, Satin Al, Hinged-base Streetlight Pole, Stock No. 014273

Manufacturer:		er:	Valmont Industries, Inc.	
Catalo	Catalog Number:		R-1308-40-60-4-T-H-SBF	
where:	where:			
R	=	cross section, round		
1308	=	nominal mounting height, 14 ft		
40	=	top outer diameter, 4 in		
60	=	base outer diameter, 6 in		
4	=	wall thickness, .125 in		
Т	=	shape of shaft, tapered		
Н	=	base or mounting, hinged		
SBF	=	finish, satin brushed finish		

#### 8. Sources

**Borek, Tom**; SCL Engineer and subject matter expert for 5752.05 (tom.borek@seattle.gov)

**Chao, Yaochiem**; SCL Engineer, originator and subject matter expert for 5752.05 (yaochiem.chao@seattle.gov)

Li, Jesse; SCL Engineer and subject matter expert for 5752.05 (jessi.li@seattle.gov)

**Nsiiro, Julius**; SCL Engineer and subject matter expert for 5752.05 (julius.nsiiro@seattle.gov)