

Streetlight Poles, Pedestrian, Concrete, Direct-Buried



1. Scope

This material standard covers the requirements for concrete pedestrian streetlight poles. This standard applies to the following Seattle City Light stock numbers:

Stock No.	Mounting Height	Color
574003	16 ft 5 in	Green natural
574004	20 ft	Gray natural
574010	16 ft 5 in	White

2. Application

Concrete pedestrian streetlight poles are used to support pedestrian streetlight luminaires with a minimum diameter opening of 3-1/2 inches.

Concrete streetlight poles are direct-buried in the ground.

Concrete streetlight poles are installed in designated locations. Contact Streetlight Engineering for details.

In 2013, stock number 574007 (22-ft gray concrete pole) was replaced by 574004 (20-ft gray concrete pole).

3. Industry Standards

Concrete streetlight poles shall meet the applicable requirements of the following industry standards:

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

4. Requirements

4.1 General

Concrete 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

4.2 Shaft

The concrete pole shall be made of pre-stressed, spun-cast concrete with uniformly wrapped solid steel pre-stressing wire.

16-ft 5-in Mounting Height – Stock Nos. 574003 & 574010

Cross section	octagonal
Mounting height, nominal	16 ft 5 in
Pole length, nominal	20 ±0.5 ft
Pole-top diameter, nominal	3-1/2 in
Wall thickness, minimum (in)	n/a
Weight, maximum	380 lbs

20-ft Mounting Height – Stock No. 574004

Cross section	octagonal
Mounting height, nominal	20 ft
Pole length, nominal	23 ft 7 in
Pole-top diameter, nominal	3-1/2 in
Wall thickness, minimum (in)	n/a
Weight, maximum	470 lbs

4.3 Grounding

All reinforcing steel, strand, wire, and stud bolts shall be electrically bonded.

A standard, copper grounding wire for ground connection shall be pre-installed and accessible at the hand-hole. Copper grounding wire shall be minimum 5-feet long.

4.4 Handhole

Table 4.4. Handhole Specifications

Size, minimum (in)	1-3/8 in wide x 9 in high
Finish/color	Match pole finish/color
Location	
nominal	Centered 18 in above ground when installed
maximum	Centered 30 in above ground when installed

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

The handhole shall have a vandal-proof aluminum cover, 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 of 30 inches above the base of the pole.

4.5 Pole Base Plate

None required.

4.6 Fixture Mounting

Concrete streetlight poles shall be designed to support a single post-top luminaire with a minimum inner diameter opening of 3-1/2 inches.

4.7 Finish

Concrete streetlight poles shall have an acrylic coating with the following finishes:

Table 4.7. Streetlight Pole Finishes

Stock No.	Finish	Color
574003	Exposed aggregate	Green natural
574004	Exposed aggregate	Gray natural
574010	Polished aggregate	White

4.8 Pole Top Cap

None required.

4.9 Anchor Bolts

None required.

5. Packaging

Concrete streetlight poles shall be 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's Stock Number

6. Issuance

EA

7. Approved Manufacturers

7.1 16-ft-5-in Green Concrete Streetlight Pole, Stock No. 574003

Manufacturer	Ameron/Centrecon
Catalog No.	S-E-O-5-413
<i>where:</i>	
S	= series, S
E	= mounting, embedded (direct-buried)
O	= cross-section, octagonal
5	= mounting height, 16 ft 5 in
413	= finish, green natural exposed aggregate with acrylic coating

7.2 20-ft Gray Concrete Streetlight Pole, Stock No. 574004

Manufacturer:	Ameron/Centrecon
Catalog No.:	S-E-O-6-113
<i>where:</i>	
S	= series, S
E	= mounting, embedded (direct-buried)
O	= cross-section, octagonal
6	= mounting height, 19 ft 8 in
113	= finish, gray natural exposed aggregate with acrylic coating

7.3 16-ft-5-in White Concrete Streetlight Pole, Stock No. 574010

Manufacturer	Ameron/Centrecon
Catalog No.:	S-E-O-5-222
<i>where:</i>	
S	= series, S
E	= mounting, embedded (direct-buried)
O	= cross-section, octagonal
5	= mounting height, 16 ft 5 in
222	= finish, white polished aggregate with acrylic coating

8. References

Chao, Yaochiem; SCL engineer, originator and subject matter expert for 5758.11;
(yaochiem.chao@seattle.gov)

Centrecon & Victorian Series; Ameron specification sheet; January 2012

S-Series Octagonal Pole; Ameron, Centrecon Series, January 2012