

Streetlight Poles, Roadway, Aluminum, Round, Anchor Base Type



1. Scope

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

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

| Stock No. | Mounting Height (ft) |
|------------------|-----------------------------|
| 573984 | 25 |
| 573986 | 35 |

2. Application

Round roadway streetlight poles are installed with a streetlight luminaire support bracket per SCL 5705.2. Support brackets have a 2-ft rise to achieve the desired luminaire mounting height.

SCL Stock No. 573984 is used to support cobra-head style, residential streetlight luminaires.

SCL Stock No. 573986 is used to support cobra-head style, arterial streetlight luminaires.

Round roadway streetlight poles are installed onto 4-bolt, 11-1/2-inch bolt circle streetlight pole foundations, SCL Stock No. 568028.

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3. Industry Standards

Round roadway 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 B 117; Standard Practice for Operating Salt Spray Apparatus

ASTM D 2247; Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity

4. Requirements

4.1 General

Round roadway 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.

Round roadway 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-T4 aluminum alloy, treated to T6 condition after welding.

25-ft Mounting Height, Stock No. 573984

| | |
|--------------------------|----------------|
| Cross section | round |
| Mounting height, nominal | 25 ft |
| Pole length | 24 ft-8 in |
| Pole-top diameter | 4-1/2 ± 1/8 in |
| Wall thickness, minimum | .250 in |
| Weight, maximum | 150 lb |

35-ft Mounting Height, Stock No. 573986

| | |
|--------------------------|----------------|
| Cross section | round |
| Mounting height, nominal | 35 ft |
| Pole length | 34 ft-8 in |
| Pole-top diameter | 4-1/2 ± 1/8 in |
| Wall thickness, minimum | .250 in |
| Weight, maximum | 205 lb |

4.3 Grounding

A tapped grounding pad shall be provided equipped with a stainless-steel screw (minimum size 1/4-20 and maximum 3/8-16), to accommodate a grounding lug. The pad shall be located on the interior of the pole opposite the handhole or directly adjacent to the handhole.

4.4 Handhole

Table 4.4. Handhole Specifications

| | |
|---------------|---------------------------|
| Size, minimum | 4 in W x 6 in H |
| Finish | Match pole finish |
| Location | |
| nominal | Centered 18 in above base |
| maximum | Centered 30 in above base |

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

The handhole shall have an aluminum cover attached with stainless steel internal hex screws.

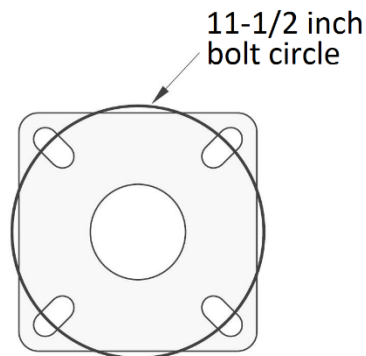
The aluminum cover shall be weatherproof.

4.5 Anchor Base Plate

The base plate shall be fixed.

The base plate shall be sized to accommodate four one-inch anchor bolts spaced 90 degrees apart on an 11-1/2-inch bolt circle. Tamper resistant aluminum nut cover discs shall be included.

Figure 4.5. Anchor Base Detail



4.6 Fixture Mounting

Round roadway streetlight poles shall be designed to support a single luminaire support bracket with luminaire. See SCL 5705.2 for luminaire support bracket requirements.

4.7 Finish

The outer surface of the pole shall be satin finish aluminum. Finish shall meet spray requirements of ASTM B 117 and the humidity resistance requirements of ASTM D 2247.

4.8 Pole Top Cap

Pole top cap shall be cast aluminum.

Pole top cap shall be supplied with stainless steel screws.

4.9 Anchor Bolts

None required.

5. Packaging

Round roadway 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.

Poles shall be packaged in bundles, and legibly marked with:

- Manufacturer name
- Manufacturer catalog number
- Seattle City Light stock number

Pole hardware shall be packaged in boxes, and legibly marked with:

- Manufacturer name
- Manufacturer catalog number
- Seattle City Light stock number

6. Issuance

EA

7. Approved Manufacturers

7.1 25 ft Round Roadway Streetlight Pole, Stock No. 573984

Manufacturer: Valmont Industries, Inc.

Catalog Number: **2408-45-80-8-T-4-SBF**

where:

2408 = overall pole height, 24 ft–8 in

45 = top diameter, 4-1/2 in

80 = butt diameter, 8 in

8 = wall thickness, .250 in

T = shape of shaft, round tapered

4 = base or mounting, 4-bolt anchor base

SBF = finish, satin brushed finish

Manufacturer: Hapco

Catalog Number: **RTA-25-F-8-B-4-01**

where:

RTA = pole, round-tapered aluminum

25 = nominal mounting height, 25 ft

F = wall thickness, .250 in

8 = butt diameter, 8 in

B = base diameter, 11.25 in

4 = base or mounting, 4-bolt anchor base

01 = finish, satin finish

7.2 35 ft Round Roadway Streetlight Pole, Stock No. 573986

Manufacturer: Valmont Industries, Inc.

Catalog Number: **3408-45-80-8-T-4-SBF**

where:

3408 = overall pole height, 34 ft-8 in

45 = top dimension, 4-1/2 in

80 = butt dimension, 8 in

8 = wall thickness, .250 in

T = shape of shaft, round tapered

4 = base or mounting, 4-bolt anchor base

SBF = finish, satin brushed finish

Manufacturer: Hapco

Catalog Number: **RTA-35-F-8-B-4-01**

where:

RTA = pole, round-tapered aluminum

35 = nominal mounting height, 35 ft

F = wall thickness, .250 in

8 = butt diameter, 8 in

B = base diameter, 11.25 in

4 = base or mounting, 4-bolt anchor base

01 = finish, satin finish

8. References

SCL Material Standard 5705.2; "Bracket, Aluminum Luminaire Support for Metal Poles"

9. Sources

Chao, Yaochiem; SCL engineer, originator and subject matter expert for 5750.03

RTA25E8B4-; Hapco 4 Bolt Base, Hapco specifications; dated 04/10/2013

RTA35E8B4-; Hapco 4 Bolt Base, Hapco specifications; dated 04/10/2013

DR8451; Valmont Anchor Base Pole, dated February 2, 2018

www.valmont.com