

Streetlight Poles, Pedestrian, Fiberglass, Anchor Base Type



1. Scope

This standard covers the requirements for 12-ft gray fiberglass pedestrian streetlight poles.

This standard applies to Seattle City Light stock number 574030.

2. Application

Fiberglass streetlight poles are only used to support stock number 572660, K56 Tudor luminaire in Thermal Red color.

Fiberglass streetlight poles are installed in the Chinatown-International District (CID), designated a historic district by the City of Seattle.

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

The post shall be designed with a minimum safety factor of 2:1 and have no more than a 10% deflection at full wind loading.

Fiberglass streetlight poles are supplied with an ornament base cover painted Thermal Red.

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3. Industry Standards

Fiberglass streetlight poles shall meet the applicable requirements of the latest revision of the following industry standard:

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

4. Requirements

4.1 General

Fiberglass 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.

Fiberglass streetlight poles shall consist of a fiberglass shaft factory bonded to an aluminum alloy or steel base plate.

4.2 Shaft

Fiberglass shaft shall be constructed of continuous fiberglass filament combined with a thermosetting epoxy resin.

12-ft Mounting Height Fiberglass Pole - Stock No. 574030

Cross section	octagonal
Mounting height, nominal	12 ft
Pole length, nominal	12 ft
Pole-top diameter, nominal	4-1/2 in
Post-top tenon size	3 in O.D. x 3 in
Weight, maximum	380 lb

4.3 Grounding

None required.

4.4 Handhole

Table 4.4. Handhole Specifications

Size, minimum	2-in wide x 5-in high
Finish/Color	Match pole finish/color
Location, nominal	Centered 14 in above base

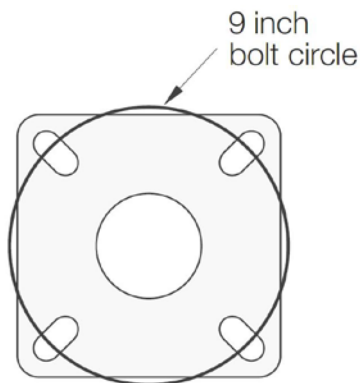
The handhole shall be reinforced so as to result in no loss of shaft strength.

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

4.5 Pole Base Plate

Base plate shall be fixed and sized to accommodate four 3/4-in anchor bolts spaced 90 degrees apart on a 9-in bolt circle, as shown below.

Figure 4.5. Anchor Base Plate



4.6 Fixture Mounting

Pedestrian round streetlight poles shall be designed to support a pole-top mounted luminaire with a 3-1/2-in inner diameter opening.

4.7 Finish

The pole's outer surface shall be coated with a durable, chemical-resistant, UV-light-resistant protective finish.

4.8 Pole Top Cap

None required.

4.9 Anchor Bolts

None required.

4.10 Base Cover

The ornamental base cover shall be two-piece and supplied with the pole.

The base cover shall be constructed from the same material as the shaft.

The base cover shall be painted Thermal Red and finished with the same material as the shaft.

5. Packaging

Fiberglass streetlight poles shall be individually protected with a spiral wrapping of 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

EA

7. Approved Manufacturers

7.1 12-ft Fiberglass Streetlight Pole, Stock No. 574030

Manufacturer	Whatley
Catalog Number	XO45-D10M-OCT-12-AB-GRY-30-30
<i>where:</i>	
XO	= pole series, Xtreme Octagonal
45	= top diameter, 4.5 in
D10M	= base type, D10M
OCT	= base shape, octagonal
12	= above grade height, 12 ft
AB	= installation method, anchor base
GRY	= color, grey
30	= tenon outer diameter, 3 in
30	= tenon height, 3 in

8. Sources

Chao, Yaochiem; SCL engineer, originator and subject matter expert for 5760.13;
(yaochiem.chao@seattle.gov)

SPC7491; Whatley Decorative Lamp Post, Pole X045, Decorative Base D10M-OCT,
dated February 2011

www.whatley.com