

Cast Aluminum Streetlight Base and Collar Assemblies



1. Scope

This standard covers the requirements for cast aluminum streetlight base and collar assemblies. These assemblies are also known as historic, ornamental, or Chief Seattle bases.

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

Stock Number	Description
568031	Base assembly with access door
568033	Collar assembly, 10-inch diameter
568039	Collar assembly, 12-inch diameter
568114	Access door (if ordered separately)

Material requirements for cast *bronze* streetlight base and collar assemblies are outside the scope of this standard. They are found in Material Standard 5680.44.

Material requirements for cast aluminum streetlight base and collar assemblies intended for installation over 16-inch diameter poles are outside the scope of this standard. Sixteen-inch diameter poles are matched with a special, oversized Chief Seattle base that was developed exclusively for the Seattle Department of Transportation (SDOT) for the Mercer Corridor Improvement project. SDOT is responsible for these special base and collar assemblies and molds.

Poles, arms, and luminaries are outside the scope of this standard.

2. Application

Cast streetlight base and collar assemblies are used to support and decorate streetlight poles in city-designated historic areas and City Light-designated streetlight districts.

Table 2 identifies areas where bronze and aluminum assemblies have been installed. Contact City Light Streetlight Engineering for up-to-date application information.

Table 2, Decorative Streetlight Base Locations

Streetlight Districts	Casting Material
Pioneer Square	Bronze
International District	Aluminum
Westlake (3rd Avenue, Westlake Park, Pine Street, Pike Street)	Aluminum
5th Avenue central business district	Aluminum

Use 10-inch diameter collars on fluted steel poles. Use 12-inch collars on Metro strain poles located in Westlake Park. The same base will accommodate either size collar.

3. Industry Standards

Castings shall meet the applicable requirements of the following industry standard:

ASTM B26-12; "Standard Specification for Aluminum-Alloy Sand Castings"

4. Requirements

4.1. General

Casting patterns are the property of Seattle City Light, a department of the City of Seattle. Parts produced from the City's patterns shall not be used by any other entity without prior, written approval by the City.

Pattern tooling shall not be altered or modified without the prior approval of Seattle City Light Standards.

Casting material shall be ANSI 356.0/UNS A03560 and meet the requirements of ASTM B26, Table 1.

Casting material temper shall be F (as fabricated) and meet the requirements of ASTM B26, Table 2.

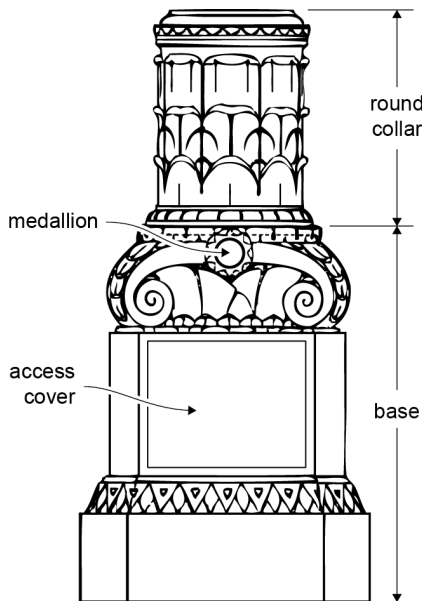
Joining-surface gaps shall not exceed 1/16th inch.

Bases, collars, access doors, and medallions shall be finished with Sherwin-Williams POWDURA TGIC Powder Coating, DGS2-40003, Railroad Green.

The supplier shall assemble pieces according to Sections 4.2 through 4.6. A quantity-one stock number shall consist of one assembly.

Collar and base assemblies shall be secured to each other using four 1/4-20 x 3/8-inch stainless-steel, cup-point, set screws, (SSCP (SS))

Figure 4.1, Base and Collar Assembly



4.2. Base Assembly

Each base assembly shall be composed of two casting halves and one access door made using the patterns furnished by Seattle City Light.

Base assembly casting halves and access door shall be assembled by the supplier and secured with six 1/4-20 x 1-inch stainless-steel, flat-head, socket-cap screws (FHSC (SS)).

4.3. Collar Assembly

Each collar assembly shall be composed of two pieces made using the pattern furnished by Seattle City Light.

Collar assembly casting halves shall be assembled by the supplier and secured with four 10-24 x 1-inch FHSC (SS).

4.4. Access Door

The access door shall be secured to the base with two 10-24 x 1 FHSC (SS).

4.5. Medallion

Four medallions shall be used to lock the collar assembly to the base assembly.

Two medallions shall be of the fish design and two medallions shall be of the Chief Seattle design.

Figure 4.5, Medallions



Like designs shall be installed on faces opposite from each other.

5. First Article Inspection and Approval

The successful bidder shall submit the number of the aluminum alloy they plan to use number to Seattle City Light Standards for approval prior to fabricating the first production piece.

The successful bidder shall submit a sample of aluminum with the proposed powder coating to Seattle City Light Standards for approval of color and quality before fabricating the first production piece.

The successful bidder shall submit a first production piece to Seattle City Light Standards for approval before fabricating the balance of the order.

MATERIAL STANDARD

6. Packaging

Streetlight assemblies shall be packaged in wood crates designed to protect against damage that could occur during shipping, handling, or long-term outside storage.

Crates shall be secured to pallets for handling by forklift. A loaded pallet shall not exceed 4 feet in height or 1,000 pounds in weight.

Each crate shall be legibly marked or tagged with the following information:

- Manufacturer's name
- Product description
- Seattle City Light's stock number
- Seattle City Light's purchase order number

7. Issuance

Stock Unit: EA

8. Approved Manufacturer

Travis Pattern & Foundry, Inc. – Spokane, Washington

9. Sources

SCL Material Standard 5680.0; "Ornamental Cast Base and Collar, Aluminum, for Streetlight Standards" (canceled)

SCL Material Standard 5680.33; "Cast Aluminum Streetlight Base and Collar Assemblies" (canceled/renumbered)

SCL Material Standard 5780.44; "Cast Bronze Streetlight Base and Collar Assemblies"

10. References

Streetlight Handbook, Seattle City Light, July 2000

Shipek, John; SCL Standards Engineer; originator of 5780.33 (john.shipek@seattle.gov)

Sande, BJ; Travis Pattern & Foundry, subject matter expert for 5780.33

ASME B18.12-2001 - Glossary of Terms for Mechanical Fasteners

www.travispattern.com