# **Cast Bronze Streetlight Bases and Collar Assemblies**



#### 1. Scope

This standard covers the requirements for cast bronze 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 (SCL) stock numbers:

| Stock No. | Description  |
|-----------|--|
| 568030    | Base assembly with access door and<br>four medallions (two fish, two Chief<br>Seattle) |
| 568032    | Collar assembly, 10-inch diameter  |
| 012474    | Collar assembly, 12-inch diameter  |
| 568116    | Access door (if ordered separately)  |
| 015028    | Replacement medallion, Chief Seattle design (if ordered separately)                    |
| 015029    | Replacement medallion, fish design<br>(if ordered separately)                          |

Material requirements for cast *aluminum* streetlight base and collar assemblies are outside the scope of this standard. See SCL 5780.33.

Poles and fixtures 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 SCL-designated streetlight districts.

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

# **Table 2. Decorative Streetlight Base Locations**

| Streetlight Districts  | <b>Casting Material</b> |
|--|-------------------------|
| Pioneer Square   | Bronze                  |
| International District   | Aluminum                |
| Westlake (3rd Avenue,<br>Westlake Park, Pine Street,<br>Pike Street) | Aluminum                |
| 5th Avenue, Central Business<br>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 B584-11;** "Standard Specifications for Copper Alloy Sand Castings for General Applications"

#### 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.

Patterns shall not leave the United States.

Patterns shall not be altered or modified without prior, written approval by the City.

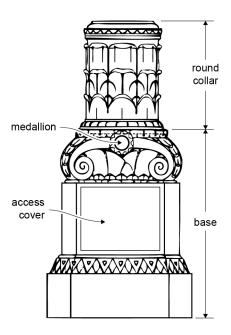
Standards Coordinator Laura Vanderpool



Standards Engineering Supervisor Brett Hanson Division Director Bob Risch

#### 4. Requirements continued

#### Figure 4.1. Base and Collar Assembly



The City retains the right to reclaim the patterns at any time at its discretion.

Casting material shall be C87600-series silicon-bronze alloy as specified in ASTM B584, Table 1.

Casting surfaces shall be uncoated.

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

The supplier shall assemble pieces according to Sections 4.2 through 4.5. 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, silicon-bronze, cuppoint, set screws (SSCP (SB)).

#### 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.

The base assembly casting halves and access door shall be assembled by the supplier and secured with six 1/4-20 x 1-inch silicon bronze, flat-head socket-cap screws (FHSC (SB)).

## 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  $10-24 \times 1$ -inch FHSC (SB) screws.

#### 4.4 Access Door

The access door shall have nominal dimensions of 12-1/8 inches wide by 8-3/4 inches high.

The access door shall be secured to the base with two  $10-24 \times 1$ -inch FHSC (SB) screws.

## 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.

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

#### Figure 4.5. Medallions



# 5. First Article Inspection and Approval

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

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

#### 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 a forklift. Loaded pallets 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 Manufacturers

| Stock No. | Description  | Travis Pattern & Foundry Part No. |
|-----------|--|-----------------------------------|
| 568030    | Base assembly with access door and four medallions (two fish, two Chief Seattle) | 568030                            |
| 568032    | Collar assembly, 10-inch diameter  | 568032                            |
| 012474    | Collar assembly, 12-inch diameter  | 012474                            |
| 568116    | Access door (if ordered separately)  | 568116                            |
| 015028    | Replacement medallion, Chief Seattle design (if ordered separately)              | 015028 BR MEDALLION (CS)          |
| 015029    | Replacement medallion, fish design (if ordered separately)                       | 015029 BR MEDALLION (FISH)        |

#### 9. References

SCL Material Standard 5780.33; "Cast Aluminum Streetlight Base and Collar Assemblies"

#### 10. Sources

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

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

**SCL Material Standard 5680.44**; Cast Bronze Streetlight Base and Collar Assemblies" (canceled/renumbered)

Shipek, John; SCL Standards Engineering Supervisor and originator of 5780.44.

Streetlight Handbook, Seattle City Light, July 2000

www.travispattern.com