

**Insulator, Horizontal Line Post, Porcelain, Clamp Top,
 for Distribution Systems**



1. Scope

This Material Standard applies to porcelain, horizontal line post insulators. This Material Standard applies to Seattle City Light Stock Number 690173.

2. Application

Horizontal line post insulators are used to construct 26.4 and 34.5 kV overhead distribution lines.

3. Industry Standards

Horizontal line post insulators shall meet the requirements of the following industry standard:

ANSI C29.7-1996 – American National Standard for Wet Process Porcelain Insulators – High Voltage Line Post Type

4. Requirements

Horizontal line post insulators shall meet the following requirements:

ANSI C29.7 Class	57-22
60 Hz dry flashover, kV rms	110, minimum
60 Hz wet flashover, kV rms	100, minimum
Positive critical impulse flashover, kV crest	180, minimum
Leakage distance, in	22, nominal
Strike/dry arc distance, in	9.5, nominal
Reference length, in	14, nominal

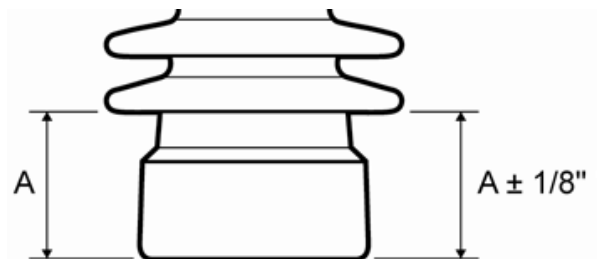
Cantilever strength

ultimate, lbs	2800, nominal
proof test, lbs	1400, minimum
Center hole thread, in	3/4 – 10, UFS-2B
Porcelain color	gray, according to ANSI C29.7, Section 5.2
Insulator base and clamp bracket	according to ANSI C29.7, Section 5.3
Trunnion bolt, City Light special	2 inches long with hot-dipped galvanized jam nut

5. Quality Assurance

The distance between the bottom of the base and the bottom skirt around the circumference of the insulator shall be uniform with a maximum difference of 1/8 inch.

Figure 5. Maximum Difference in Uniform Distance



<i>standards coordinator</i>	<i>standards supervisor</i>	<i>unit director</i>
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6. Testing

Test data that establishes compliance with the requirements of ANSI C29.7, Section 8 shall be provided upon request.

7. Marking

Horizontal line-post insulators shall be clearly and indelibly marked in accordance with ANSI C29.7-1996, Section 7. Marking shall include, but not be limited to:

- Manufacturer's name or symbol
- Year of manufacture
- Product Identification Number

8. Packaging

Horizontal line-post insulators shall be packaged in a way that prevents damage during shipping, handling, and long-term outside storage.

Crates shall be secured to pallets for handling by forklifts. Pallets shall not exceed 4 feet in height or 1000 pounds in weight.

Individual packages shall be legibly marked with:

- Manufacturer's name
- Manufacturer's catalog number
- Seattle City Light's Stock Number

Shipping containers shall be legibly marked with:

- Seattle City Light's Purchase Order Number
- Seattle City Light's Stock Number

9. Issuance

Stock Unit: EA

10. Approved Manufacturers

Stock No	Manufacturers and Catalog Numbers		
	Lapp Insulator	Newell Porcelain Company	Victor Insulators, Inc.
690173	4635LN70	48623-7401	62255-SL

11. Sources

Diop, Aida; SCL Standards Engineer, subject matter expert and originator of 6901.60
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Shipek, John; SCL Standards Engineer, subject matter expert for 6901.60 (john.shipek@seattle.gov)