

**INSULATOR, STATION POST-TYPE, PORCELAIN**



**1. Scope**

This standard covers the requirements for porcelain station post-type insulators.

This standard applies to Seattle City Light Stock Numbers 690253, 690280, 690186 and 690187.

**2. Application**

Porcelain station post-type insulators are used in substations to support buses or apparatus.

The following table gives the maximum voltage ratings for each of the Stock Numbers and their ANSI Technical Reference (TR) numbers.

Stock Number	ANSI TR Number	Voltage Rating, maximum
690253	202	7.5 kV
690280	222	7.5 kV
690186	205	15 kV
690187	208	23 kV

**3. Industry Standards**

Porcelain station post-type insulators shall meet the requirements of the following national standard:

**ANSI C29.9-1983** – American National Standard for Wet-Process Porcelain Insulators Apparatus, Post –Type



**4. Requirements**

Porcelain station post-type insulators shall meet the following requirements:

	Stock Number			
	690253	690280	690186	690187
ANSI C29.9 TR Number	202	222	205	208
BIL (Basic Impulse Insulation Level) rating, kV, nominal	95	95	110	150
60 Hz, wet flashover, kV, rms, nominal	30	30	45	60
Positive critical impulse flashover, kV crest, nominal	105	105	125	170
Leakage distance, in, nominal	10-1/2	10-1/2	15-1/2	24
Four tapped holes, size, in	1/2-13, UFS	5/8-11, UFS	1/2-13, UFS	1/2-13, UFS
Bolt circle diameter, in	3	5	3	3
Height, in, overall	7-1/2	10	10	14
Height, in, tolerance	±1/32	±1/32	±1/32	±1/32
Cantilever strength, lb, ultimate, upright	2000	4000	2000	2000

Porcelain color for station post-type insulators shall be gray, according to ANSI C29.9, Section 4.2.

Cap material and coating for station post-type insulators shall be hot-dipped galvanized iron or steel, according to ANSI C29.9, Section 4.3.

standards coordinator	standards supervisor	unit director
 Aida Diop	 John Shipek	 Darnell Cola

**Material Standard**

Insulator, Station Post-Type, Porcelain

standard number: **6901.80**

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**5. Testing**

Test data that establishes compliance with the requirements of ANSI C29.9, Section 7 shall be provided upon request.

**6. Marking**

Porcelain station post-type insulators shall be clearly and indelibly marked in accordance with ANSI C29.9, Section 6.

Marking shall include but not limited to:

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

**7. Packaging**

Porcelain station post-type 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 1,000 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

**8. Issuance**

**Stock Unit:** EA

**9. References**

**Diop, Aida;** SCL Standards Engineer, subject matter expert and originator of 6901.80 (aida.diop@seattle.gov)

**Shipek, John;** SCL Standards Engineer, subject matter expert for 6901.80 (john.shipek@seattle.gov)

**10. Approved Manufacturers**

Stock Number	Manufacturers and Catalog Numbers					
	Gamma Insulators	Lapp Insulators	Locke Insulators	Newell Porcelain Company	PPC Insulators (Seves)	Victor Insulators, Inc.
690253	8420	315202-70	PS00910	231001-7001	95 SU	1750
690280	na	315222-70	PH00910	41510-7001	95 HU	1766
690186	8425	315205-70	PS01110	231002-7001	110 SU	1751
690187	8428	315208-70	PS01510	231003-7001	150 SU	1752