# Washers, Double Coil, Helical Spring Lock



## 1. Scope

This standard applies to heavy duty double coil helical spring lock washers with chamfered ends.

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

Stock No.	Size (in)
584257	1/2
584261	5/8
584267	3/4
012651	7/8

# 2. Application

Double coil helical spring lock washers are for general pole line use. Washers maintain pressure between wood components that may shrink or swell during varying weather conditions. Keeping components tight minimizes radio and television interference.

A 1/2-inch washer is sized for use with a nominal 1/2-in diameter bolt. Install nut and tighten normally. Important: Back off nut approximately 1/4 turn after closing coils.

## 3. Industry Standards

Double coil helical spring lock washers shall meet the applicable requirements of the following industry standards:

American Society of Mechanical Engineers (ASME) B18.21.3; Double Coil Helical Spring Lock Washers for Wood Structures

American Society Testing and Materials (ASTM) B117; Standard Practice for Operating Salt Spray (Fog) Apparatus.

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### 4. Requirements

Material shall be spring grade carbon steel.

Washers shall meet the requirements of ASME B18.21.3.

Washer ends shall be chamfered.

Washer shall be exposed to at least 1500 hours of salt spray testing per ASTM B117.

Washers shall be mechanically plated. The final finish shall be a non-hexavalent chromate finish that adheres to ROHS regulations. ROHS restricts the use of lead, cadmium, mercury, and hexavalent chromium.

The finish shall provide both sacrificial and corrosive barrier resistance and shall not contribute to hydrogen embrittlement.

### 5. Packaging

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity contained (100)

Each shipping container shall be legibly marked with the following information:

- Manufacturer information
- Product description
- SCL purchase order number
- SCL stock number

#### 6. Issuance

Stock Unit: 100 per box

#### 7. Approved Manufacturers

Stock No.	Size (in)	Approximate Weight per 100 (lb)	Electrical Materials Company (Genoa City, WI) Catalog No.	Hughes Brothers, Inc. (Seward, NE) Catalog No.
584257	1/2	05	MW 1/2	_
584261	5/8	11	MW 5/8	SLW2-60EM
584267	3/4	12	MW 3/4	SLW2-70EM
012651	7/8	22	MW 7/8	SLW2-80EM

#### 8. Sources

**Shipek, John**; SCL Standards Engineer, subject matter expert and originator of 5842.50 (john.shipek@seattle.gov)

**Tilley, Kathy**; SCL Electrical Engineering Support Specialist and subject matter expert for 5842.50 (kathy.tilley@seattle.gov)

www.electricalmaterialscompany.com

www.hughesbros.com