

POLE LINERS



1. Scope

This material standard covers the requirements for barrier protection systems for wood utility poles, using pole liners and sealing tape.

This Material Standard applies to the following Seattle City Light Stock Numbers shown:

Table 1

Stock No.	Description, width x length	Pole Liner fits the following pole lengths, ft
012862	pole liner, 30" x 8'	30 to 40
012863	pole liner, 38" x 10'	50 to 60
012864	pole liner, 38" x 11'	65 to 75
012865	pole liner, 42" x 13'	80 to 100
012940	self adhesive silicon tape, roll	one roll per liner

For pole liners longer than 13 feet, please contact Material Control.

The self-adhesive tape is used to affix the pole liner to the pole.

2. Application

Barrier protection systems are used to augment preservative treated wood poles and wood based components for ground contact uses. The barrier protection system protects the susceptible portions of

the underlying wood pole against decay and termite damage. Barrier protection systems are made of impermeable, weather resistant material and are permanently affixed to the wood with tape. Barrier protection systems also prevent any chemical leeching from the pole into the surrounding groundwater and soil.

For recommended pole and pole liner application, see Table 1.

3. Industry Standards

Barrier protection systems shall meet the applicable requirements of the following industry standards:

American Wood Protection Association (AWPA) Book of Standards, published 2008, including, but not limited to:

AWPA P20-08 – All Barrier Protection System

AWPA U1-08 – Use Category System: Specification for Treated Wood.

AWPA E7-07 – Standard Method of Evaluating Wood Preservatives by Field Tests with Stakes

ASTM D4801 – 08 Standard Specification for Polyethylene Sheeting in Thickness of 0.25 mm [0.010 in.] and Greater

MATERIAL STANDARD

Pole Liners

standard number: **5092.00**

superseding: October 22, 2009

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4. General Requirement

All barrier protection systems shall meet the requirements of AWWA P20 with the following clarifications:

- Barrier protection systems shall meet the specification of ASTM D4801 for weather resistance. Other materials used for barrier protection systems shall demonstrate equivalent weather resistant performance and form a barrier between treated wood and surrounding soil.
- Barrier protection systems shall have performance rating of 7 or better on the field stacking tests conducted according to AWWA E7.
- Barrier protection systems must be compatible with wood poles treated with Copper Naphthenate and other preservatives detailed in AWWA.
- Termite resistance shall be documented for all barrier system components in accordance with AWWA E1.

5. Attributes**5.1 Pole liners**

Pole liners shall be constructed of three layers. The layers shall have the following attributes:

Pole Liner		Nominal Thickness, in
layer 1	polyethylene	0.0035
layer 2	copper foil	0.0007
layer 3	polyethylene terephthalate (PET)	0.0035
total		0.0077

5.2 Sealing Tape

Sealing tape shall be of silicon material and be self fusing.

Sealing tape shall be black and have the following attributes:

thickness, nominal:	0.0197 in
width, nominal:	6 in
length, nominal:	8 ft

6. Packaging

Pole liner and silicon tape shall be packaged separately to prevent damage during shipping and storage.

Each package shall be marked with Seattle City Light's stock number, manufacturer's name or symbol and manufacturer's catalog number.

7. Issuance

liner EA

tape RL

8. Approved Manufacturers

Copper Care Products (Part of Osmose Utilities Services)

Stock No.	Description, width x length	Copper Care/Osmose Cat. No.
012862	pole liner, 30" x 8'	77-020-030-008
012863	pole liner, 38" x 10'	77-020-038-010
012864	pole liner, 38" x 11'	77-020-038-011
012865	pole liner, 42" x 13'	77-020-042-013
012940	self adhesive silicon tape, roll (6" x 8')	99-671-241-068

9. References

5082.00; "Wood Poles, Pressure-treated, Douglas fir;" Material Standard; SCL

5072.00; "Wood Poles, Butt-treated, Cedar;" Material Standard; SCL

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