

Liquidtight Flexible Metal Conduit (LFMC)



1. Scope

This standard covers the requirements for liquidtight flexible metal conduit (LFMC).

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

<u>Stock No.</u>	<u>Trade Size (in)</u>
012096	1/2
012097	3/4
014962	1-1/4

For liquidtight flexible nonmetallic conduit (LFNC) see SCL 7080.05.

Fittings and connectors are outside the scope of this standard.

2. Application

LFMC provides protection for wiring circuits located in extremely wet or damp areas. It is suitable for above-ground use indoors or outdoors in exposed or concealed locations. It is also approved for direct burial and concrete encasement.

The physical appearance of LFMC resembles its close relative, Liquid Flexible Nonmetallic Conduit (LFNC). Both have smooth gray outer jackets that are liquidtight. However, LFMC has an inner steel armor, which makes it stronger and less vulnerable to kinking.

The 1-1/4" flex conduit is used between streetlight handholes and direct buried concrete poles.

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Handwritten signature of Andrew Strong in black ink.

3. Industry Standards

LFMC shall meet the applicable requirements of the latest revision of the following industry standard:

UL 360; “Standard for Liquid-Tight Flexible Metal Conduit”

4. Requirements

LFMC shall have the following attributes:

- Hot-dip, zinc-galvanized, low-carbon steel core material
- Moisture, oil, and sunlight resistant; and flame retardant; PVC jacket
- Gray jacket color
- 80-degree C-rated for dry locations
- 60-degree C-rated for wet locations
- 70-degree C-rated for oily locations

Table 4. LFMC Requirements

Trade Size (in)	Avg. Inside Dia. (in)	Avg. Outside Dia. (in)	Bend Radius, Min. (in)
1/2	0.622–0.642	0.820–0.840	3.5
3/4	0.820–0.840	1.030–1.050	4.25
1-1/4	1.380–1.410	1.630–1.660	7.0

5. Packaging

LFMC shall be packaged in 100-ft coils.

LFMC shall be packaged to prevent damage during shipping, handling, and storage.

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

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

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

- SCL purchase order number
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6. Issuance

Stock Unit: FT

7. Approved Manufacturers

ABB (Thomas & Betts, Carlon, Steel City)
AFC Cable Systems
Anaconda Sealtite
Calbrite Stainless Steel Conduit Systems
Cooper Power Systems (Eaton Crouse-Hinds Series)
Electri-Flex Company
Hubbell Wiring Devices-Kellems
Southwire

8. References

SCL Material Standard 7080.05; "Liquidtight Flexible Nonmetallic Conduit (LFNC)"

9. Sources

afcweb.com

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Shetab, Muneer; SCL Standards Engineer, originator, and subject matter expert for 7070.05