

Liquidtight Flexible Nonmetallic Conduit (LFNC)



1. Scope

This standard covers the requirements for liquidtight flexible nonmetallic conduit (LFNC).

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

| Stock No. | Trade Size (in) |
|-----------|-----------------|
| 013544 | 1/2 |

For liquidtight flexible metal conduit (LFMC) see SCL 7070.05.

Fittings and connectors are outside the scope of this standard.

2. Application

LFNC gives 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 LFNC resembles its close relative, Liquidtight Flexible Metallic Conduit (LFMC). Both have smooth gray liquidtight outer jackets. However, LFNC is more flexible and is used in locations where flexibility is required for installation, operation, or maintenance.

3. Industry Standards

LFNC shall meet the applicable requirements of the latest revision of the following industry standards:

UL 1660; "Liquid-Tight Flexible Nonmetallic Conduit"

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4. Requirements

LFNC shall have the following attributes:

- Nonmetallic PVC, integral Type B construction
- Gray jacket color
- 80-degree C-rated for dry locations
- 60-degree C-rated for wet locations
- 70-degree C-rated for oily locations
- -18-degree C-rated low temperatures

Table 4. Conduit 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 | 3.25 |

5. Packaging

LFNC shall be packaged in 100-ft coils.

LFNC 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

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)
Hubbell Wiring Devices-Kellems
Southwire

8. References

SCL Material Standard 7070.05; "Liquidtight Flexible Metal Conduit (LFMC)"

9. Sources

afcweb.com

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Shetab, Muneer; SCL Standards Engineer, originator, and subject matter expert for 7080.05