# CITY OF AUSTIN ELECTRIC UTILITY DEPARTMENT

## **PURCHASE SPECIFICATION**

## **FOR**

# CABLE, 600V, XLP, 2 CONDUCTOR, #12, JACKETED, BARE GROUND

DATE	PREPARED BY	ISSUANCE/REVISION	PROCESS SUPV. / MATERIALS SUPV.
10/28/1988	Robin Kittle	Issuance	
05/24/1995	Gary Noble	Revision	Richard C. Dreiss / Peter G. Soosay
12/30/1999	Carl Nance	Revision	
9/22/09	Arthur Gonzalez	Revision	

REASON FOR REVISION	AFFECTED PARAGRAPHS			
Added Ground Wire Requirement				

This specification, until rescinded, shall apply to each future purchase and contract for the commodity described herein. Retain for future reference.

# CITY OF AUSTIN ELECTRIC UTILITY DEPARTMENT PURCHASE SPECIFICATION FOR

# CABLE, 600V, XLP, 2 CONDUCTOR, #12, JACKETED, BARE GROUND

#### 1.0 SCOPE AND CLASSIFICATION

This specification covers the electrical and mechanical features of 600 volt, 90 degrees C, two (2) conductor, 7 strand, #12 AWG, jacketed cable with bare ground. This specification shall cover applicable standards, functional requirements, construction, insulation and jacket materials.

#### 2.0 APPLICABLE STANDARDS

All characteristics, definitions and terminology, except that specifically covered in this specification shall be in accordance with the latest revisions of the following standards: ICEA S-66-524, ICEA S-66-516, IEEE Std 383, ASTM B-3, B-8 and B-33, and ICEA S-68-516.

#### 3.0 FUNCTIONAL REQUIREMENT

The cable supplied under these specifications shall be used in power distribution for streetlighting and traffic signals.

#### 4.0 CONSTRUCTION

#### 4.1 Conductor

Each conductor shall be 7 strand, class B stranded, #12 AWG tinned copper.

#### 4.2 Insulation

- 4.2.1 Each conductor shall be supplied with a flame retardant, cross-linked polyethylene meeting all the requirements of ICEA S-66-524.
- 4.2.2 Color coding shall be accomplished by pigmenting the base compounds. One conductor shall be color coded with white insulation.
- 4.2.3 Insulation shall be a minimum of 30 mils.

#### 4.3 Fillers

Fibrulated non-hydroscopic fillers are acceptable.

#### 4.4 Cabling

All cables and fillers shall be cabled in accordance with ICEA S-66-524 or ICEA S-66-516.

#### 4.5 Jacket

The jacket shall be black, free stripping with average thickness of 45 mils, made of chlorinated polyethylene (CPE) or chlorosulfinated polyethylene (Hypalon).

#### 4.6 Identification

Each cable shall have surface print describing manufacturer, size, number of conductors and voltage.

#### 4.7 Ground

The 2 conductor cable shall have a bare ground wire included.

#### 5.0 TESTING

All testing shall conform to applicable standards. Test reports shall be available upon request by the Electric Utility Department.