

MATERIAL STANDARD

**CABLE, STREETLIGHT, UNDERGROUND,
CROSS-LINKED POLYETHYLENE INSULATED**



1. Scope:

This specification covers a three conductor, triplexed 7-strand copper #8 AWG, 600V, insulated cable.

2. Application:

The cable will be pulled into underground conduit for power for streetlights.

3. Standards:

The cable shall conform to all applicable requirements of ICEA S-95-658 (NEMA WC 70).

4. Conductor:

The conductor shall be soft annealed-stranded copper, per ASTM B 3 and ASTM B 8.

5. Insulation:

The minimum insulation thickness shall be 45 Mils. The insulation shall be a 600-volt Type XHHW or XHHW-2. cross-linked polyethylene compound rated at 90° C for dry locations and 75° C for wet locations per ASTM D 2655. The insulation compound shall be U V inhibited.

6. Jacket:

The three-conductor cable shall have one red, one white and one black conductor.

7. Identification:

The cable shall have one black conductor and one white conductor.

8. Marking:

At least one of the three conductors shall be marked at regular intervals with the manufacturer's name or symbol, wire size, conductor material, NEC type (where applicable), and voltage rating.

9. Packaging:

The length of cable on each reel shall be 1000 feet. The reel shall conform to the requirements of NEMA WC-26, Table 1-5a, "Nonreturnable Plywood Reels and Spools" and Table 1-7 "Drums for Nonreturnable Reels" and Table 2-1, "Capacities in Feet." Reel size shall be 24-12-10.

Tare weight shall be printed on all reels. All reels shall be plainly marked with the cable size, type, voltage, length, gross weight, City of Seattle purchase order number, and manufacturer's name. The inner end of the cable shall be brought to the outside of the reel flange and securely fastened thereto. The inner end shall not be brought out through the reel arbor. The outer end of the cable shall be fastened to the inner side of the flange.

10. Referenced Specifications:

Latest revisions of ASTM B3, ASTM B8, ASTM D2655, ICEA S95-658 (NEMA WC 70)

11. Approved Manufacturers: BICC/General, Prysmian, Service Wire, Southwire

12. Stock Unit: FT

Stock Number	Size AWG	Number of Conductors	Layer Thickness, Mils		Lbs per M-Ft.	Approx. Dia., In.
			Insulation	Jacket		
640450	8	3	45	none	-	triplexed

Standard Coordinator
John Shipek

Standards Engineering Supervisor
John Shipek

Division Director
Andrew Strong