

MATERIAL SPECIFICATION
CAST Lighting No-Ox® Wire
 UNDERGROUND LOW ENERGY
 CIRCUIT CABLE
 SPT STYLE (PARALLEL)
 INSULATION: PVC



SIZES: 16 AWG THROUGH 8 AWG – 2 CONDUCTORS
 SPT STYLE (PARALLEL)
 UL LISTED FOR DIRECT BURIAL

1.0 SCOPE

- 1.1. This specification covers the construction requirements for two-conductor underground low energy circuit cables for outdoor low voltage lighting. Construction consists of stranded tin-coated annealed copper conductors, laid parallel and insulated with polyvinyl chloride.
- 1.2. Voltage rating is 30 Volts

2.0 CONSTRUCTION

2.1. **Sizes and dimensions:**

<i>Size AWG</i>	<i>Stranding</i>	<i>Insulation Min. Ave. Wall (Inches)</i>	<i>Nominal Dimensions (Inches)</i>	<i>Resistance (Ohms/ft)</i>
18	16/.010"	.045"	.290" x .145"	.00723
16	26/.010"	.045"	.320" x .160"	.00418
14	41/.010"	.045"	.350" x .175"	.00282
12	65/.010"	.045"	.390" x .195"	.00177
10	104/.010"	.045"	.440" x .220"	.00111
8	168/.010"	.060"	.575" x .285"	



- 2.2. **Conductor:**
Bunch or rope stranded tin-coated annealed copper conforming to UL requirements
- 2.3. **Assembly:**
The two conductors are laid parallel and insulated.
- 2.4. **Insulation:**
Black polyvinyl chloride conforming to Underwriters Laboratories Class 43 to 60°C thermoplastic, suitable for direct burial. One leg has a raised ridge for polarity.

2.4.1. Operating Temperature Range: 105°C to -25°C

2.5. **Marking:**

- 2.5.1. Plain leg of wire indent printed: "CAST Lighting Size AWG 2/C Underground Low Energy Circuit Cable Sunlight Resistant for Outdoor Lighting (UL)."



- 2.5.2. Marked with feet remaining to end of roll.
- 2.6. **Testing:**
 - 2.6.1. Physically and electrically to Underwriters Laboratories miscellaneous wire.
 - 2.6.2. Conductors must be able to be separated without showing copper and must still meet UL minimum wall requirements.
- 2.7. **Product Labels:**
 - 2.7.1. Underwriters Laboratories miscellaneous wire labels.
 - 2.7.2. Certification by QC that separation test was performed on each reel.
- 2.8. **Packaging**
Provided on 500 ft. spools, shrink wrapped over wire to protect wire.
- 2.9. **Packaging Labels**
Labeled on outside of spool with No-Ox® label stickers provided by CAST Lighting
- 2.10. **#16/2 Wood Reel Specification (500' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 12" diameter; 1/4" thickness
Height (inside dimension): 7"
- 2.11. **#12/2 Wood Reel Specification (500' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 12" diameter; 1/2" thickness
Height (inside dimension): 9.5"
- 2.12. **#12/2 Steel Reel Specification (250' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 12" diameter; 1/2" thickness
Height (inside dimension): 4.5"
- 2.13. **#10/2 Wood Reel Specification (500' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 15.5" diameter; 5/8" thickness
Height (inside dimension): 7"
- 2.14. **#10/2 Wood Reel Specification (250' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 12" diameter; 5/8" thickness
Height (inside dimension): 6"
- 2.15. **#8/2 Wood Reel Specification (500' put-up)**
Inner Core: 6" diameter
Top and Bottom Disk: 15.5" diameter; 5/8" thickness
Height (inside dimension): 9.5"

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