### 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 uncoated annealed copper conductors, laid parallel and insulated with polyvinyl chloride. Listed by UL or ETL or CSȦ.

### 2.0 CONSTRUCTION:

2.1

| SIZE <br> AWG | STRANDING | INSULATION <br> MIN AVE <br> WALL <br> (MILS) | NOMINAL <br> DIMENSIONS <br> (INCHES) |
| :---: | :---: | :---: | :---: |
| 18 | $41 / .0063^{\prime \prime}$ | 45 | $.290 \times .145$ |
| 16 | $26 / .0100^{\prime \prime}$ | 45 | $.320 \times .160$ |
| 14 | $41 / .0100^{\prime \prime}$ | 45 | $.350 \times .175$ |
| 12 | $65 / .0100^{\prime \prime}$ | 45 | $.390 \times .195$ |
| 10 | $104 / .0100^{\prime \prime}$ | 45 | $.440 \times .220$ |
| 8 | $133 / .0111^{\prime \prime}$ | 60 | $.590 \times .295$ |

### 2.2 Conductors:

Bunch or rope stranded uncoated annealed copper conforming to UL requirements.

### 2.3 Assembly:

The two conductors are laid parallel and insulated. A continuous web shall keep the conductors together.

### 2.4 Insulation:

Black polyvinyl chloride conforming to Underwriters Laboratories Class $4360^{\circ} \mathrm{C}$ thermoplastic, suitable for direct burial. One leg has a raised ridge for polarity.

### 2.5 Marking:

Plain leg of wire indent or ink printed: "Paige Electric Size AWG 2/C Underground Low Energy Circuit Cable Sunlight Resistant for Outdoor Lighting Listing file Number RoHS"

### 2.6 Testing:

2.6.1 Conductors must be able to be separated without showing copper and must still meet UL minimum wall requirements. Certification by QC that seperation test was performed on each reel.

### 3.0 SPLICING RECOMMENDATIONS:

Wire splices are the weak link of any electrical circuit. It is especially important to make proper joints in landscape lighting systems because the joints are exposed to wet and damp environments that can cause corrosion of the copper conductor, premature failure, and fires. Paige Electric recommends the strict use of Model DBR/Y-6, as manufactured by the 3M Company (Paige specification P7364D) or Silicone-filled wire nuts as manufactured by IDEAL Industries (Paige specification P7372D)

