P.O. Box 368. Union, NJ 07083-0368, 908-687-7810, 800-327-2443, Fax: 908-687-2722

# UNDERGROUND FEEDER CABLE (UF) & TWU INSULATION: POLYVINYL CHLORIDE SIZES: 14 AWG - 4/0 AWG



- 1.0 SCOPE:
  - 1.1 This specification covers the construction requirements for Underground Feeder Cable, Type UF and TWU for use in accordance with the National Electrical Code or operation at a potential of 600 Volts or less and at a temperature of 75°C or less. UL listed for UF and c(UL) for TWU.

## 2.0 CONSTRUCTION:

#### 2.1 Conductor:

Soft drawn bare copper meeting the requirements of ASTM specification B-3 or B-8.

- **2.2** *Temperature Rating:* -10°C +75°C.
- **2.3** *Insulation:* Polyvinyl chloride, 75°C rated conforming to UL Standards 493 and 83.
- 2.4 Manufacturer's Identification: Surface marked with Paige-Electric, voltage rating, size and type, and UL file numbers.
- 2.5 Underwriters' Laboratories Approval:

All cables shall be tested physically and electrically in accordance with UL Standard 493, and 83 (paragraphs 28.1, 29.1 and 29.2). All reels and cartons bear UL and/or c(UL) labels.

## 3.0 PARALLEL CONSTRUCTION:



3.1

P7001D-Rev 7

Multiple wires, of varying sizes and colors, are bound together with a reinforced filmanet tape in a helical fashion.

SIZE AWG	STRAND- ING	INSULATION WALL (MILS)	APPROX. DIAMETER (INCHES)	CURRENT CARRY CAPACITY*
14	SOLID	.060	.190	15
12	SOLID	.060	.205	20
10	SOLID	.060	.225	30
8	SOLID	.080	.285	40
14	7	.060	.200	15
12	7	.060	.215	20
10	7	.060	.240	30
8	7	.080	.300	40
6	7	.080	.340	55
4	7	.080.	.390	70
2	7	.080	.450	95
1	19	.095	.520	110
1/0	19	.095	.560	125
2/0	19	.095	.605	145
3/0	19	.095	.660	165
4/0	19	.095	.715	195

\*Current carrying capacity based on not more than 3 conductors in raceway or cable or direct burial (at room temperature of 30°C)

## 4.0 SPLICING RECOMMENDATIONS

4.1

Underground splices shall be made in accordance with National Electrical Code® Articles 300.5 (Underground Installations) and 110.14 (Electrical Connections) using 3M DBY-6 or DBR-6 or 82A series connectors, which are UL listed under "UL 486D-Direct Burial", for wet or damp locations, 600 volts. Connectors that are not listed at all, or listed under UL Standard UL 486C as "Compression Connectors", shall not be allowed.