



3-Layer 15kV AAC Tree Wire/Spacer Cable

An Alternative and Robust Design to Bare AAC Conductors to Harden the Electrical Grids.

3-Layer 15kV AAC Tree Wire Concentrically Stranded AAC Track-Resistant Crosslinked Polyethylene.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Concentrically stranded AAC
2. **Strand Shield:** Semi-conducting cross linked polymer
3. **Inner Layer:** Low-Density Crosslinked Polyethylene (LDXLPE)
4. **Outer Layer:** High-Density Track-Resistant Crosslinked Polyethylene

APPLICATIONS AND FEATURES:

Used for primary and secondary overhead distribution where limited space is available or desired for rights-of-way. Installed the same as bare conductors, however, covering is effective in preventing direct shorts and instantaneous flashovers should tree limbs or other objects contact conductors in such close proximity.

- Tree Wire - Used for spans where trees crowd the right-of-way, such as in wooded residential areas, when a minimum of interference with the environment is desired. Covering minimizes power outages due to conductor contact with tree limbs, reducing the need for frequent or severe trimming.
- Covered Aerial MV Cable (CAMV)/Spacer Cable - Installed with other Covered Aerial MV cables and a supporting messenger through a series of space-maintaining devices (spacers). The resulting close-proximity configuration minimizes the amount of space and hardware required for line installation, particularly useful in congested areas.
- Covering Rated 90°C Normal and 130°C Emergency Operation. Unless adequate knowledge of the thermal characteristics of the environment is known, the permissible conductor temperature should be reduced by 10°C or in accordance with available data.

SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ICEA S-121-733 Tree Wire and Messenger Supported Spacer Cable

Table 1 – Weights and Measurements

| Cond. Size | Cond. Strands | Diameter Over Conductor | Conductor Shield Thickness | Inner Layer Thickness | Outer Layer Thickness | Approx. OD | Approx. Weight | Rated Strength |
|---------------|---------------|-------------------------|----------------------------|-----------------------|-----------------------|------------|----------------|----------------|
| AWG/ Kcmil | # | inch | mil | mil | mil | inch | lb/1000ft | lb |
| 266.8 | 19 | 0.537 | 15 | 75 | 75 | 0.867 | 407 | 4473 |

All dimensions are nominal and subject to normal manufacturing tolerances

