

3-Layer 15kV AAAC Tree Wire

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

3-Layer 15kV AAAC Tree Wire Concentrically Stranded AAAC Track-Resistant Crosslinked Polyethylene (HDTRXLPE).

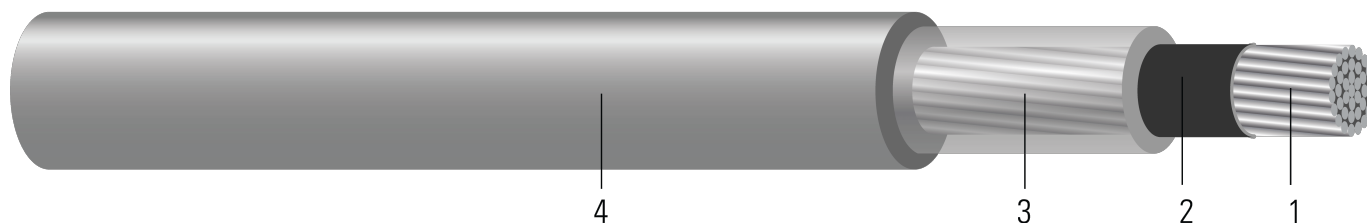


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

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

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 - 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.

SPECIFICATIONS:

- ASTM B398 Standard Specification for Aluminum-Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes
- ASTM B399 Standard Specification for Concentric-Lay-Stranded, Aluminum Alloy 6201-T81 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
48.69	7	0.250	15	75	75	0.58	137	1584
77.47	7	0.316	15	75	75	0.646	179	2520
123.3	7	0.398	15	75	75	0.728	241	4014
155.4	7	0.447	15	75	75	0.777	283	4851
195.7	7	0.502	15	75	75	0.832	334	6111
246.9	7	0.563	15	75	75	0.893	397	7704
312.8	19	0.642	15	75	75	0.972	473	9900
394.5	19	0.72	15	75	75	1.05	568	11970
465.4	19	0.783	15	75	75	1.113	649	14040
559.5	19	0.858	15	75	75	1.188	755	16920
652.4	19	0.927	20	75	75	1.267	894	19710
740.8	37	0.99	20	75	75	1.33	963	21960

All dimensions are nominal and subject to normal manufacturing tolerances

