



Overview

The ASTM B231 35kV Aerial Cable AAC (compact) with a 3-layer track-resistant PE is utilized in both tree wire and spacer cable configurations. It conforms to the standards set by ICEA S-121-733 for Tree Wire and Messenger Supported Spacer Cable. The cable employs a 3-layer system, comprising a conductor shield (layer #1) and a 2-layer covering (layers #2 and #3).

Application

This aerial cable serves overhead primary and secondary distribution systems rated at 35 kV (nominal), primarily to mitigate faults resulting from contact or spatial constraints. Its 3-layer track-resistant system minimizes short-circuits and flashovers caused by interactions with trees or wildlife, effectively averting system outages, damage, or fires.

Tree Wire: Installed in a flat configuration akin to bare or covered overhead conductors, typically with self-supporting conductors like ACSR.

Spacer Cable: Installed in a diamond configuration with uniform spacing using spacer hardware. Supported by a bare messenger, such as bare aluminum clad steel, ACSR, OPGW, or galvanized steel wire, spacer cable assemblies occupy minimal space, ideal for narrow corridors or rights-of-way.

Construction

This cable features a single AAC conductor and a 3-layer extruded shield and covering system:

Conductor: AAC (1350-H19, compact stranded).

Conductor Shield: An extruded semiconducting thermoplastic shield that is freely stripped from the conductor and bonded to the covering.

Inner and Outer Covering: The inner layer comprises low-, medium-, or high-density polyethylene (LDPE, MDPE, or HDPE), while the outer layer consists of track-resistant medium- or high-density polyethylene (TK-MDPE or TK-HDPE). All layers are tightly bonded together, providing resistance to sunlight and tracking.

Specification

These cables are manufactured and tested to meet or exceed the following standards:

-ASTM B230 – Aluminum 1350–H19 Wire for Electrical Purposes
-ASTM B231 – Concentric-Lay-Stranded Aluminum 1350 Conductors

-ASTM B400 – Compact Round Concentric-Lay-Stranded Conductors
ASTM D1248 – Polyethylene Plastics Extrusion Materials for

-Wire and Cable

-ICEA S-121-733 – Tree Wire and Messenger Supported Spacer Cable

Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

Conductor Size	Conductor Stranding	Conductor Dia.	Conductor Shield Thickness	Covering Thickness Inner Layer	Covering Thickness Outer Layer	Overall Dia.	Conductor Weight	Total Weight	Rated Strength
AWG or kcmil		inch	inch	inch	inch	inch	lb/FT	lb/FT	lb/FT
1/0	7	0.336	0.015	0.175	0.125	0.966	98.9	380	1990
2/0	7	0.376	0.015	0.175	0.125	1.006	124.8	424	2510
3/0	7	0.423	0.015	0.175	0.125	1.053	157.2	476	3040
4/0	7	0.475	0.015	0.175	0.125	1.105	198.4	540	3830
266.8	19	0.537	0.015	0.175	0.125	1.167	250.1	619	4970
336.4	19	0.603	0.015	0.175	0.125	1.233	315.5	712	6150
397.5	19	0.659	0.015	0.175	0.125	1.289	372.9	794	7110
477	19	0.722	0.015	0.175	0.125	1.352	446.8	895	8360
556.5	37	0.780	0.020	0.175	0.125	1.420	521.3	1005	9940
636	37	0.835	0.020	0.175	0.125	1.475	596.1	1104	11400
795	37	0.932	0.020	0.175	0.125	1.572	745.3	1295	13900

NOTES

1. Dimensions and weights are subject to standard manufacturing tolerances and are subject to change without notice.

2. Cables are manufactured, tested and marked to meet or exceed the requirements in ICEA S-121-733 for tree wire and messenger supported spacer cable suitable for installation and use in systems rated 35 kV.