

Covered Overhead Conductor — Tree Wire

Single Conductor Single or Dual Layer Covered Tree Wire

Product Construction:

Complete Conductor:

Tree wire consists of a single conductor (AAC, AAAC or ACSR) covered with either a single layer of track resistant covering or a dual layer covering with a track resistant outer layer. Tree wire is manufactured to ICEA S-121-733.



Conductors:

- AAC – compressed stranding, 1350-H19 aluminum made to ASTM B231
- AAAC – concentric stranding, 6201-81 aluminum alloy made to ASTM B399
- ACSR – concentric stranding, 1350-19 aluminum with GA2 steel core made to ASTM B232

Coverings:

Single Layer:

- TR-HDPE – Black Track Resistant High Density Polyethylene
- TR-HDXLPE – Black Track Resistant Cross-Linked Polyethylene

Dual Layer:

- LLDPE/TR-HDPE - Linear Low Density Polyethylene/Black Track Resistant High Density Polyethylene
- XLPE/TR-HDXLPE - Cross-Linked Polyethylene/Black Track Resistant Cross-Linked Polyethylene

Features and Benefits:

Covering protects against faults due to contact.

Applications:

For areas with overhead power lines that have a potential for contact with trees or other debris.

Options:

- Gray colored HDXLPE or XLPE

AAC - SINGLE LAYER TREE WIRE FOR 5 KV APPLICATIONS

SIZE (AWG OR kcmil)	STRANDING	COVERING THICKNESS (INCHES)	APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
4	7	0.080	0.385	73	792
2	7	0.080	0.443	104	1215
1/0	7	0.080	0.517	147	1791
2/0	7	0.080	0.562	178	2259
3/0	7	0.080	0.610	217	2736
4/0	7	0.080	0.666	265	3447
266.8	7	0.080	0.728	322	4347
266.8	19	0.080	0.734	323	4473
336.4	19	0.080	0.805	397	5535
397.5	19	0.080	0.861	461	6399
477	19	0.080	0.928	544	7524
477	37	0.080	0.931	545	7821

AAC - DUAL LAYER TREE WIRE FOR 15 KV APPLICATIONS

SIZE (AWG OR kcmil)	NO. OF WIRES	COVERING THICKNESS (INCHES)		APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
		INNER	OUTER			
#2	7	0.075	0.075	0.583	149	1215
1/0	7	0.075	0.075	0.657	199	1791
2/0	7	0.075	0.075	0.702	234	2259
3/0	7	0.075	0.075	0.750	277	2736
4/0	7	0.075	0.075	0.806	330	3447
266.8	7	0.075	0.075	0.868	393	4347
266.8	19	0.075	0.075	0.874	395	4473
336.4	19	0.075	0.075	0.945	475	5535
397.5	19	0.075	0.075	1.001	544	6399
477	19	0.075	0.075	1.068	633	7524
477	37	0.075	0.075	1.071	633	7821
556.5	37	0.075	0.075	1.132	721	8946
636	37	0.075	0.075	1.190	806	10260

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

Covered Overhead Conductor — Tree Wire

Single Conductor Single or Dual Layer Covered Tree Wire

AAAC - SINGLE LAYER TREE WIRE FOR 5 KV APPLICATIONS						
SIZE (kcmil)	EQUIVALENT SIZE (AWG OR kcmil)	NO. OF WIRES	COVERING THICKNESS (INCHES)	APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
48.69	4	7	0.080	0.410	83	1584
77.47	2	7	0.080	0.476	118	2520
123.3	1/0	7	0.080	0.558	168	3852
155.4	2/0	7	0.080	0.607	204	4851
195.7	3/0	7	0.080	0.662	248	6111
246.9	4/0	7	0.080	0.723	304	7704
312.8	266.8	19	0.080	0.802	373	9450
394.5	336.4	19	0.080	0.880	459	11970
465.4	397.5	19	0.080	0.943	533	14040
559.5	477	19	0.080	1.018	631	16920

AAAC - DUAL LAYER TREE WIRE FOR 15 KV APPLICATIONS							
SIZE (kcmil)	EQUIVALENT SIZE (AWG OR kcmil)	NO. OF WIRES	COVERING THICKNESS (INCHES)		APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
			INNER	OUTER			
48.69	4	7	0.075	0.075	0.550	126	1584
77.47	2	7	0.075	0.075	0.616	167	2520
123.3	1/0	7	0.075	0.075	0.698	224	3852
155.4	2/0	7	0.075	0.075	0.747	264	4851
195.7	3/0	7	0.075	0.075	0.802	313	6111
246.9	4/0	7	0.075	0.075	0.863	374	7704
312.8	266.8	19	0.075	0.075	0.942	450	9450
394.5	336.4	19	0.075	0.075	1.020	543	11970
465.4	397.5	19	0.075	0.075	1.083	623	14040
559.5	477	19	0.075	0.075	1.158	727	16920
652.4	556.5	19	0.080	0.080	1.227	825	19710
740.8	636	37	0.080	0.080	1.290	922	21960
927.2	795	37	0.080	0.080	1.408	1121	27450

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

Covered Overhead Conductor — Tree Wire

Single Conductor Single or Dual Layer Covered Tree Wire

ACSR - SINGLE LAYER TREE WIRE FOR 5 KV APPLICATIONS

SIZE (AWG OR kcmil)	NO. OF WIRES	COVERING THICKNESS (INCHES)	APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
2	6/1	0.080	0.476	137	2708
1/0	6/1	0.080	0.558	198	4161
2/0	6/1	0.080	0.607	242	5035
3/0	6/1	0.080	0.662	297	6289
4/0	6/1	0.080	0.723	365	7933
266.8	18/1	0.080	0.769	367	6536
266.8	26/7	0.080	0.802	448	10735
336.4	18/1	0.080	0.844	451	8246
336.4	26/7	0.080	0.880	553	13395
336.4	30/7	0.080	0.901	620	16435
397.5	18/1	0.080	0.903	525	9443
397.5	24/7	0.080	0.932	609	13870
397.5	26/7	0.080	0.943	645	15485
477	18/1	0.080	0.974	620	11210
477	24/7	0.080	1.006	721	16340
477	26/7	0.080	1.018	764	18525
477	30/7	0.080	1.043	858	22610

ACSR - DUAL LAYER TREE WIRE FOR 15 KV APPLICATIONS

SIZE (AWG OR kcmil)	NO. OF WIRES	COVERING THICKNESS (INCHES)		APPROX. CABLE OVERALL DIAMETER (INCHES)	APPROX. WEIGHT (LBS/1000 FT)	RATED STRENGTH (LBS)
		INNER	OUTER			
2	6/1	0.075	0.075	0.616	186	2708
1/0	6/1	0.075	0.075	0.698	254	4161
2/0	6/1	0.075	0.075	0.747	302	5035
3/0	6/1	0.075	0.075	0.802	362	6289
4/0	6/1	0.075	0.075	0.863	435	7933
266.8	18/1	0.075	0.075	0.909	441	6536
266.8	26/7	0.075	0.075	0.942	525	10735
336.4	18/1	0.075	0.075	0.982	532	8246
336.4	26/7	0.075	0.075	1.020	638	13395
336.4	30/7	0.075	0.075	1.041	706	16435
397.5	18/1	0.075	0.075	1.043	611	9443
397.5	24/7	0.075	0.075	1.072	698	13870
397.5	26/7	0.075	0.075	1.083	735	15485
477	18/1	0.075	0.075	1.114	713	11210
477	24/7	0.075	0.075	1.146	816	16340
477	26/7	0.075	0.075	1.158	861	18525
477	30/7	0.075	0.075	1.183	957	22610
556.5	18/1	0.075	0.075	1.179	813	13015
556.5	24/7	0.075	0.075	1.214	933	18810
556.5	26/7	0.075	0.075	1.227	986	21470
636	18/1	0.075	0.075	1.240	910	14915
636	24/7	0.075	0.075	1.277	1046	21470
636	26/7	0.075	0.075	1.290	1105	23940
795	45/7	0.080	0.080	1.383	1159	20995
795	24/7	0.080	0.080	1.412	1294	26505
795	26/7	0.080	0.080	1.427	1367	29925

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances.
In this context, weight means mass.