

ACSS/TW - Aluminum Conductor Steel Supported Trapezoidal Shaped Aluminum Strands

APPLICATION: Used as bare overhead transmission cable and as primary and secondary distribution cable. It is designed to continuously operate up to 250°C without losing strength.

CONSTRUCTION: Aluminum alloy 1350 wires, concentrically stranded around a steel core with one or more layers of 63% minimum average conductivity aluminum 1350-O wire stranded around it. The steel core carries most or the entire mechanical load of the conductor due to the fully annealed or soft temper aluminum. The steel core wires are protected from corrosion by a zinc-5% aluminum-mischmetal-alloy coating. Diameter or Area Equal to Standard ACSR Sizes.

SPECIFICATIONS: ACSS/TW bare conductors meet or exceed the following ASTM specifications:

- B-498 Zinc-Coated (Galvanized) Steel Core Wire for Use in Overhead Electrical Conductors
- B-500 Metallic Coated Stranded Steel Core for Aluminum Conductors, Steel Reinforced
- B-606 High-Strength Zinc-Coated (Galvanized) Steel Core Wire for Aluminum and Aluminum-Alloy Conductors, Steel Reinforced
- B-609 Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes
- B-802 Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum Conductors, Steel Reinforced
- B-803 High Strength Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum and Aluminum-Alloy Conductors, Steel Reinforced
- B-857 Shaped Wire Compact Concentric-Lay-Stranded Aluminum Conductors, Coated-Steel Supported (ACSS/TW)
- B-957 Extra-High-Strength and Ultra-High-Strength Zinc-Coated (Galvanized) Steel Core Wire for Overhead Electrical Conductors
- B-958 Extra-High-Strength and Ultra-High-Strength Class A Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Use in Overhead Electrical Conductors

Code Word	Size	Type no.	Cross Sectional Area		Stranding			Diameter		Weight			Rated Breaking Strength		
			Alu	Total	Layers of Alu	Alu Wires	Individual Steel Wires	Steel Core	Complete Cable	Alu	Steel	Total	Standard Strength	High Strength	Ultra High Strength
	kcmil		sq. in.	sq. in.	no.	no.	no. x diameter	Inches	Inches	lbs/kft	lbs/kft	lbs/kft	lbs	lbs	lbs
Flicker ACSS/TW	477	13	0.3747	0.4233	2	18	7 x 0.0940	0.282	0.776	448	165	612	13,000	14,200	16,400
Hawk ACSS/TW	477	16	0.3746	0.4356	2	18	7 x 0.1053	0.316	0.790	448	206	655	15,600	17,100	19,800
Dove ACSS/TW	556.5	16	0.4371	0.5083	2	20	7 x 0.1138	0.341	0.850	523	241	765	18,200	19,900	23,100
Mystic ACSS/TW	666.6	13	0.5236	0.5915	2	20	7 x 0.1111	0.333	0.910	626	230	856	18,200	19,900	22,900
Maumee ACSS/TW	768.2	13	0.6041	0.6826	2	20	7 x 0.1195	0.358	0.980	721	266	987	21,000	23,000	26,500
Wabash ACSS/TW	762.8	16	0.5992	0.6966	2	20	7 x 0.1331	0.399	0.990	717	330	1047	24,900	26,900	31,200
Drake ACSS/TW	795	16	0.6244	0.7261	2	20	7 x 0.1360	0.408	1.010	748	344	1092	25,900	28,000	32,500
Rail ACSS/TW	954.0	7	0.7493	0.8011	3	32	7 x 0.0971	0.291	1.060	899	176	1075	16,700	18,000	20,400
Cardinal ACSS/TW	954.0	13	0.7493	0.8464	2	20	7 x 0.1329	0.399	1.084	896	329	1225	26,000	28,000	32,300
Suwannee ACSS/TW	959.6	16	0.7537	0.8762	2	22	7 x 0.1493	0.448	1.108	903	415	1318	30,700	33,100	38,600
Curlew ACSS/TW	1033.5	13	0.8117	0.9169	2	21	7 x 0.1383	0.415	1.130	970	356	1326	28,200	30,300	35,000
Hudson ACSS/TW	1158.4	13	0.9092	1.0280	2	25	7 x 0.1467	0.440	1.196	1087	401	1488	31,100	33,500	38,800
Grackle ACSS/TW	1192.5	13	0.9366	1.0554	3	38	19 x 0.0892	0.446	1.225	1126	403	1529	32,600	35,500	41,500
Pheasant ACSS/TW	1272.0	13	0.9990	1.1250	3	39	19 x 0.0921	0.461	1.260	1201	429	1630	34,100	37,300	43,000
Martin ACSS/TW	1351.5	13	1.0620	1.1964	3	39	19 x 0.0949	0.470	1.300	1276	456	1732	36,200	39,600	45,600
Merrimack ACSS/TW	1433.6	13	1.1250	1.2677	3	39	19 x 0.0978	0.489	1.340	1356	484	1840	38,400	42,000	48,400
Pecos ACSS/TW	1622.0	13	1.2736	1.4425	3	39	19 x 0.1064	0.532	1.420	1531	573	2104	45,000	49,300	56,900
Chukar ACSS/TW	1780.0	8	1.3986	1.5126	3	37	19 x 0.0874	0.437	1.450	1673	388	2061	35,300	38,200	43,900
Cumberland ACSS/TW	1926.9	13	1.5134	1.7049	3	42	19 x 0.1133	0.567	1.545	1819	650	2469	51,600	56,400	65,000
Santee ACSS/TW	2627.3	8	2.0630	2.2317	4	64	19 x 0.1062	0.531	1.761	2492	571	3063	51,300	55,600	63,100

All values are nominal and subject to correction

Packing Note: Must have 20" of cable exposed and secured at inner end