

A photograph of a galvanized steel wire strand railing installed along a paved road. The railing consists of two horizontal strands of blue-coated steel wire held by vertical galvanized steel posts. The background shows a clear road and some distant vehicles.

GALVANIZED STEEL WIRE STRAND



Huatong Cable Inc. was founded in 1993 in Luoyang, Henan Province, the venerable historical capital that has been sacred ground since the late Neolithic period and known for its beautiful peonies. Luoyang was among the first “National Historical and Cultural Cities” listed by the State Council, and also the most important industrial city in central China. Born during the rapid industrialization of China, Huatong Cable Inc. has made notable contributions to the development of State Grid Corporation of China, China Southern Power Grid Company and other power enterprises at home and abroad. The honors Huatong has won are well-deserved, thanks to its determined pursuit of product innovation, painstaking efforts to serve the customers and strong will to forge ahead into the future for over twenty years.

Huatong Cable Inc. is comprised of the Overhead Conductor Business Division, the Power Cable Division and the Business Division for Wires and Cables of Electrical Equipment. All three divisions are responsible for the manufacturing and sales of their respective products. In 2002, the Division for Cable Industrial Design and Technology R&D was established to provide product design and R&D support for the company. As a complement to its independent research, and in order to meet specific requirements of individual customers as well as market demand for special cables, Huatong has also sought cooperation with Shanghai Electric Cable Research Institute and China Electric Power Research Institute, among other academic institutions. So far the company enjoys 25 exclusive rights to use registered trade mark and 14 patents of proprietary intellectual property rights, among which, ACSR-720/50 has passed the technical evaluation by the China Electricity Council while its EHV(Extra High Voltage) conductor at 1000kV+ has been put into production and use, with satisfactory performance.

Products of Huatong Cable Inc. are widely applicable in power transmission, transport, energy and urban construction, etc. It adopts the team marketing method and has set up regional sales sections, with more than a hundred sales outlets and hundreds of salespersons capable of optimizing customer satisfaction all over China. Our partners are not limited to state-owned electric power companies: we have provided high quality products for China Datang Corporation, China Huaneng Group, China Guodian Corporation, China Power Investment Corporation, Sinopec Group, China National Petroleum Corporation, etc., as well. In addition, the company has also been the supplier for national key projects like the Qinghai-Tibet Railway, the Wuhan-Guangzhou Railway, the West-East Natural Gas Transmission, the South-to-North Water Diversion and the Three Gorges Dam. International partners include America, India, Burma, the Philippines, Australia, Nigeria, Kenya, Ghana, South Africa, Brazil and Chile, among other countries. Huatong becomes increasingly well-known and has won the trust of more and more customers.

In 2013, the Huatong brand was awarded the “China Famous Trade Mark” by the Trademark Office of China’s State Administration of Industry and Commerce, which eloquently demonstrates Huatong’s brand influence and prestige among Chinese customers. Huatong is also the first Henan-based brand to have won such an honor. In 2015 Huatong Cable was successfully listed on NEEQ stock market, which is bound to further enhance the company’s reputation and help it expand in an accelerated yet steady manner. Huatong Cable Inc. is dedicated to improve itself by contributing to the customer’s progress. It seeks to strengthen its strategic partnership with customers with business model innovation, product portfolio restructuring and development of environmentally-friendly high quality products. With this objective in mind, Huatong Cable Inc. will continue its unswerving efforts to better serve the customer and embrace the future.



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Zinc-Coated (Galvanized) Steel Wire Strand

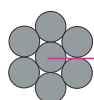


APPLICATIONS

Zinc-Coated steel wire is suitable for use as guys, messengers, stay wires, span wires, suspension of telecommunication cables, the earth wire/ground wire in overhead lines, barrier cable along the road or structure cable in construction, and for similar purposes

STANDARD

Produced according to standard IEC61089, ASTM A475, ASTM A363, BS183 or specific requirements from customers



Galvanized Steel Wire

Zinc-Coated (Galvanized) Steel Wire Strand

IEC61089

Nominal Area St	Code Number	Area	Number of Wires	Diameter		Liner Mass	Rated Strength				Max.D.C. Resistance at 20 °C
				Wire	Cond.		S1A	S1B	S2A	S3A	
		mm ²		mm	mm	kg/km	kn	kn	kn	kn	Ω/km
30	4	27.1	7	2.22	6.66	213.3	36.3	33.6	39.3	43.9	7.1445
40	6.3	42.7	7	2.79	8.36	335.9	55.9	51.7	60.2	67.9	4.5362
65	10	67.8	7	3.51	10.53	553.2	87.4	80.7	93.5	103	2.8578
85	12.5	84.7	7	3.93	11.78	666.5	109.3	100.8	116.9	128.8	2.2862
100	16	108.4	7	4.44	13.32	853.1	139.9	129	199.7	164.8	1.7861
100	16	108.4	19	2.7	13.48	857	142.1	131.2	152.9	172.4	1.7944
150	25	169.4	19	3.37	16.85	1339.1	218.6	201.6	238.9	262.6	1.1484
250	40	271.1	19	4.26	21.31	2141.6	349.7	322.6	374.1	412.1	0.7177
250	40	271.1	37	3.05	21.38	2148.1	349.7	322.6	382.3	420.2	0.7196
400	63	427	37	3.83	26.83	3383.2	550.8	508.1	589.3	649	0.4569

ASTM A475

Physical Properties of Zinc-Coated Steel Wire Strand																			
The numbers in boldface type indicate sizes and grades most commonly used and readily available																			
Nominal Diameter of Strand in.[mm]		Number of Wires in Strand	Nominal Diameter of Coated Wires in Strand in.[mm]	Approximate Weight of Strand lb/1000 ft[kg/km]		Minimum Breaking Strength of Strand .lbf[KN]													
						Common Grade			Siemens-Martin Grade			High-Strength Grade			Extra High-Strength Grade				
1/8	3.18	7	0.041	1.04		32	48		540	2.402		910	4.048	1	330	5.916	1	830	8.140
5/32	3.97	7	0.052	1.32		51	76		870	3.870	1	470	6.539	2	140	9.519	2	940	13.078
3/16	4.76	7	0.062	1.57		73	109	1	150	5.115	1	900	8.452	2	850	12.677	3	990	17.748
3/16	4.76	7	0.065	1.65		80	119												
7/32	5.56	3	0.104	2.64		88	131	1	400	6.228	2	340	10.409	3	500	15.569	4	900	21.796
7/32	5.56	7	0.072	1.83		98	146	1	540	6.850	2	560	11.387	3	850	17.126	5	400	24.020
1/4	6.35	3	0.120	3.05		117	174	1	860	8.274	3	40	13.523	4	730	21.040	6	740	29.981
1/4	6.35	3	0.120	3.05		117	174												
1/4	6.35	7	0.080	2.03		121	180	1	900	8.452	3	150	14.012	4	750	21.129	6	650	29.581
9/32	7.14	3	0.130	3.30		137	204	2	080	9.252	3	380	15.035	5	260	23.398	7	500	33.362
9/32	7.14	7	0.093	2.36		164	244	2	570	11.432	4	250	18.905	6	400	28.469	8	950	39.812
5/16	7.94	3	0.145	3.68		171	255	2	490	11.076	4	090	18.193	6	350	28.246	9	100	40.479
5/16	7.94	7	0.104	2.64		205	305	3	200	14.234	5	350	23.798	8	000	35.586	11	200	49.82
5/16	7.94	7	1.109	2.77		225	335												
3/8	9.52	3	0.165	4.19		220	328	3	330	14.813	5	560	24.732	8	360	37.187	11	800	52.489
3/8	9.52	7	0.120	3.05		273	407	4	250	18.905	6	950	30.915	10	800	48.040	15	400	68.503
7/16	11.11	7	0.145	3.68		399	595	5	700	25.355	9	350	41.591	14	500	64.499	20	800	92.523
1/2	12.70	7	0.165	4.19		517	770	7	400	32.917	12	100	53.823	18	800	83.627	26	900	119.657
1/2	12.70	19	0.100	2.54		504	751	7	620	33.895	12	700	56.492	19	100	84.961	26	700	118.768
9/16	14.29	7	0.188	4.78		671	1000	9	600	42.703	15	700	69.837	24	500	108.981	35	000	155.688
9/16	14.29	19	0.113	2.87		637	949	9	640	42.881	16	100	71.616	24	100	107.202	33	700	14.905
5/8	15.88	7	0.207	5.26		813	1211	11	600	51.599	19	100	84.961	29	600	131.667	42	400	188.605
5/8	15.88	19	0.125	3.18		796	1186	11	000	48.930	18	100	80.513	28	100	124.995	40	200	178.819
3/4	19.05	19	0.150	3.81	1	155	1721	16	000	71.172	26	200	116.543	40	800	181.487	58	300	259.331
7/8	22.22	19	0.177	4.50	1	581	2356	21	900	97.416	35	900	159.691	55	800	248.211	79	700	354.523
1	25.40	19	0.200	5.08	2	073	3089	28	700	127.664	47	000	209.066	73	200	325.610	104	500	464.839
1	25.40	37	0.143	3.63	2	057	3065	28	300	125.885	46	200	205.508	71	900	319.827	102	700	456.832
11/8	28.58	37	0.161	4.09	2	691	4010	36	000	160.136	58	900	262.000	91	600	407.457	130	800	581.827
11/4	31.75	37	0.179	4.55	3	248	4840	44	600	198.391	73	000	324.720	113	600	505.318	162	200	721.502

Zinc-Coated (Galvanized) Steel Wire Strand

ASTM A363

Physical properties of Zinc-coated steel Overhead Ground Wire Strand												
Nominal Diameter of Strand.		Number of Wires in Strand	Nominal Diameter of Coated Wire in Strand.		Approximate Weight of Strand.		Minimum Breaking Strength of Strand, lbf (KN)					
In.	mm		in.	mm	lb/1000ft	kg/km	High-Strength Grade		Extra-High-Strength Grade		Utilities Grade	
5/16	7.94	3	0.145	3.68	171	255	...	...	...	...	6500	28.9
5/16	7.94	7	0.104	2.64	205	305	8000	35.6	11200	49.8	...	...
3/8	9.52	7	0.12	3.05	273	407	10800	48	15400	68.4	11500	51.2
7/16	11.11	7	0.145	3.68	399	595	14500	64.5	20800	92.5	...	...
1/2	12.7	7	0.165	4.19	517	770	18800	83.6	26900	119.6	...	...

BS 183

Construction Number of wires/wire diameter	Approximate strand diameter	Minimum breaking load of strand							Approx. Mass
		Grade350	Grade480	Grade700	Grade850	Grade1000	Grade1150	Grade1300	
	mm	KN	KN	KN	KN	KN	KN	KN	kg/1000m
7/0.56	1.7	0.60	0.83	1.20	--	1.70	1.98	2.24	14
7/0.71	2.1	0.97	1.33	1.94	--	2.75	3.19	3.60	28
7/0.85	2.6	1.39	1.90	2.80	--	3.95	4.57	5.15	31
7/0.90	2.7	1.55	2.14	3.10	--	4.45	5.12	5.80	35
7/1.00	3.0	1.92	2.64	3.85	--	5.50	6.32	7.15	43
7/1.25	3.8	3.01	4.10	6.00	--	8.55	9.88	11.15	67
7/1.40	4.2	3.75	5.17	7.54	9.16	10.75	12.35	14.00	84
7/RS	4.3	3.85	5.28	7.70	9.35	11.00	12.65	14.30	86
7/1.60	4.8	4.90	6.75	9.85	11.95	14.10	16.20	18.30	110
7/1.80	5.4	6.23	8.55	12.45	--	17.80	20.50	23.20	140
7/2.00	6.0	7.70	10.55	15.40	--	22.00	25.30	38.60	170
7/2.36	7.1	10.70	14.70	21.40	--	30.60	35.20	39.80	240
7/2.65	8.0	13.50	18.50	27.00	--	38.60	44.40	50.20	300
7/3.00	9.0	17.30	23.75	34.65	--	49.50	56.90	64.30	392
7/3.15	9.5	19.10	26.20	38.20	--	54.55	62.75	70.90	430
7/3.25	9.8	20.30	27.85	40.65	--	58.05	66.80	75.50	460
7/3.65	11.0	25.60	35.15	51.25	--	73.25	84.20	95.20	570
7/4.00	12.0	30.90	42.20	61.60	--	88.00	101.0	114.0	690
7/4.25	12.8	34.75	47.65	69.50	--	99.30	114.0	129.0	780
7/4.75	14.0	43.40	59.45	86.80	--	124.0	142.7	161.3	970
19/1.00	5.0	5.22	7.16	10.45	--	14.92	17.16	19.40	120
19/1.25	6.3	8.16	11.19	16.32	--	23.32	26.81	30.31	180
19/1.40	7.0	10.24	14.04	20.47	--	29.25	33.64	38.02	230
19/1.60	8.0	13.37	18.34	26.75	--	38.20	43.93	49.66	300
19/2.00	10.0	20.90	28.65	41.78	50.74	59.69	68.64	77.60	470
19/2.50	12.5	32.65	44.80	65.29	79.28	93.27	107.3	121.3	730
19/3.00	15.0	47.00	64.50	94.00	114.1	134.3	154.5	174.6	1050
19/3.55	17.8	65.80	90.27	131.6	159.9	188.0	216.3	244.5	1470
19/4.00	20.0	83.55	114.6	167.1	203.0	238.7	274.6	310.4	1870
19/4.75	23.8	117.85	161.6	235.7	286.0	336.7	387.2	437.7	2630

Zinc-Coated (Galvanized) Steel Core Wire for Use in Overhead Electrical Conductors



APPLICATIONS

It is suitable for use as strength member, core wire in overhead electrical conductors

STANDARD

Produced according to standard IEC60888, ASTM B498, BS EN50189 or specific requirements from customers



Galvanized Steel Wire

Zinc-Coated (Galvanized) Steel Core Wire for Use in Overhead Electrical Conductors

IEC 60888

Mechanical properties, torsion twist requirements and wrap test mandrel diameter for regular steel wires					
Nominal wire diameter(mm)		Diameter tolerance	Minimum stress at 1% extension (Mpa)	Minimum ultimate tensile stress (Mpa)	Minimum ultimate elongnation(%)
Over	Up to and including				
Class 1 zinc coating					
1.24	2.25	±0.03	1170	1340	3.00
2.25	2.75	±0.04	1140	1310	3.00
2.75	3.00	±0.05	1140	1310	3.50
3.00	3.50	±0.05	1100	1290	3.50
3.50	4.25	±0.06	1100	1290	4.00
4.25	4.75	±0.06	1100	1290	4.00
4.75	5.50	±0.07	1100	1290	4.00
Class 2 zinc coating					
1.24	2.25	±0.05	1100	1240	4.00
2.25	2.75	±0.06	1070	1210	4.00
2.75	3.00	±0.06	1070	1210	4.00
3.00	3.50	±0.07	1000	1190	4.00
3.50	4.25	±0.09	1000	1190	4.00
4.25	4.75	±0.10	1000	1190	4.00
4.75	5.50	±0.11	1000	1190	4.00

Mechanical properties, torsion twist requirements and wrap test mandrel diameter for high strength steel wires					
Nominal wire diameter(mm)		Diameter tolerance	Minimum stress at 1% extension (Mpa)	Minimum ultimate tensile stress (Mpa)	Minimum ultimate elongation(%)
Over	Up to and including				
Class 1 zinc coating					
1.24	2.25	±0.03	1310	1450	2.50
2.25	2.75	±0.04	1280	1410	2.50
2.75	3.00	±0.05	1280	1410	3.00
3.00	3.50	±0.05	1240	1410	3.00
3.50	4.25	±0.06	1170	1380	3.00
4.25	4.75	±0.06	1170	1380	3.00
4.75	5.50	±0.07	1170	1380	3.00
Class 2 zinc coating					
1.24	2.25	±0.05	1240	1380	2.50
2.25	2.75	±0.06	1210	1340	2.50
2.75	3.00	±0.06	1210	1340	3.00
3.00	3.50	±0.07	1170	1340	3.00
3.50	4.25	±0.09	1100	1280	3.00
4.25	4.75	±0.10	1100	1280	3.00
4.75	5.50	±0.11	1100	1280	3.00

Zinc-Coated (Galvanized) Steel Core Wire for Use in Overhead Electrical Conductors

Mechanical properties, torsion twist requirements and wrap test mandrel diameter for extra-high strength steel wires					
Nominal wire diameter(mm)		Diameter tolerance	Minimum stress at 1% extension (Mpa)	Minimum ultimate tensile stress (Mpa)	Minimum ultimate elongation(%)
Over	Up to and including				
Class 1 zinc coating					
1.24	2.25	±0.03	1450	1620	2.00
2.25	2.75	±0.04	1410	1590	2.00
2.75	3.00	±0.05	1410	1590	2.50
3.00	3.50	±0.05	1380	1550	2.50
3.50	4.25	±0.06	1340	1520	2.50
4.25	4.75	±0.06	1340	1520	2.50
4.75	5.50	±0.07	1270	1500	2.50

ASTM B498

Tensile Requirements						
Specified Diameter, in.	Stress at 1 % Extension, min, Kpsi		Ultimate Tensile Strength, min, Kps		Elongation in 10 in., min, %	
	Class A	Class C	Class A	Class C	Class A	Class C
0.0500 to 0.0899,incl	190	170	210	190	3.0	3.0
0.0900 to 0.1199,inc	185	165	205	185	3.5	3.0
0.1200 to 0.1399,incl	180	160	205	185	4.0	3.0
0.1400 to 0.1900,incl	170	155	200	180	4.0	4.0

Zinc Coating		
Specified Diameter of Coated Wire, in.	Area Density of Coating, min, of Uncoated Wire Surface, oz/ft 2	
	Class A	Class C
0.0500 to 0.0599, incl	0.60	1.80
0.0600 to 0.0749, incl	0.65	1.95
0.0750 to 0.0899, incl	0.70	2.10
0.0900 to 0.1039, incl	0.75	2.25
0.1040 to 0.1199, incl	0.80	2.40
0.1200 to 0.1399, incl	0.85	2.55
0.1400 to 0.1799, incl	0.90	2.70
0.1800 to 0.1900, incl	1.00	3.00

Zinc-Coated (Galvanized) Steel Core Wire for Use in Overhead Electrical Conductors

BS EN50189

Nominal wire diameter mm		Diameter tolerance	Stress at 1% extension $R_{e1,0}$	Tensile strength R_m	Elongation on 250mm A_{250}
Over	Up to and including	mm	N/mm ²	N/mm ²	%
			Minimum	Minimum	Minimum
1,24	1,50	±0,03	1 170	1400	3,0
1,50	1,75	±0,03	1 170	1400	3,0
1,75	2,25	±0,03	1 170	1400	3,0
2,25	2,75	±0,04	1 140	1350	3,0
2,75	3,00	±0,05	1 140	1350	3,5
3,00	3,50	±0,05	1 110	1300	3,5
3,50	4,25	±0,06	1 110	1300	4,0
4,25	4,75	±0,06	1 110	1300	4,0
4,75	5,50	±0,07	1 110	1300	4,0

Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire or Strand



APPLICATIONS

It is suitable for applications requiring high-level corrosion resistance, drawability, and formability

STANDARD

Produced according to standard ASTM A856/A856M, ASTM B802, ASTM B803, ASTM B958/B958M or specific requirements from customers



Galvanized Steel Wire

Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire or Strand

ASTM A856/A856M

TABLE 1 Minimum Weight [Mass] of Zinc per Unit Area of Uncoated Wire Surface (Inch-Pound Units)						
Wire Diameter in.A	Class 1	Class 3 or A Coating, oz/ft2	Class 4 Coating, oz/ft2	Class B Coating, oz/ft2	Class 5 Coating, oz/ft2	Class C Coating, oz/ft2
0.035	0.15	0.15	n/a	0.90	n/a	1.35
0.041	0.15	0.50	n/a	1.10	n/a	1.50
0.048	0.15	0.55	n/a	1.10	n/a	1.65
0.054	0.20	0.60	n/a	1.20	n/a	1.80
0.062	0.20	0.65	n/a	1.20	n/a	1.80
0.072	0.20	0.65	n/a	1.20	n/a	1.80
0.076	0.25	0.70	1.20	1.40	2.00	2.10
0.080	0.25	0.70	1.20	1.40	2.00	2.10
0.092	0.28	0.75	1.20	1.50	2.00	2.25
0.099	0.28	0.80	1.20	1.60	2.00	2.40
0.106	0.30	0.80	1.20	1.60	2.00	2.40
0.120	0.30	0.85	1.20	1.70	2.00	2.55
0.135	0.30	0.85	1.20	1.70	2.00	2.55
0.148	0.35	0.90	1.20	1.80	2.00	2.70
0.162	0.35	0.90	1.20	1.80	2.00	2.70
0.177	0.44	0.90	1.20	1.80	2.00	2.70
0.192	0.50	1.00	1.20	2.00	2.00	3.00
0.207	0.53	1.00	1.20	2.00	2.00	3.00
and larger						

TABLE 4 Tensile Strength for Temper Designation (Inch-Pound Units)			
Wire Diameter, mm	MPA		
	Soft	Medium	Hard
0.035 to under 0.080	75 max	70 to 100	90 to 120
0.080 to under 0.106	75 max	70 to 95	85 to 115
0.106 to 0.176A,incl	70 max	65 to 90	80 to 110
Over 0.176	70 max	60 to 85	75 to 105

Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire or Strand

TABLE 1 Minimum Weight of Zn-5 AL-MM Alloy Coating per Unit Area of Uncoated Wire Surface, oz-ft²[g/m²]

Wire Diameter in.[mm] ^A		Class 1 oz/ft ² [g/m ²]		Class 3 or Coating oz/ft ² [g/m ²]		Class 60 Coating oz/ft ² [g/m ²]		Class B Coating oz/ft ² [g/m ²]		Class 100 Coating oz/ft ² [g/m ²]		Class C Coating oz/ft ² [g/m ²]	
0.035	0.89	0.15	46	0.45	137	n/a		0.90	275	n/a		1.35	412
0.041	1.04	0.15	46	0.50	153	n/a		1.00	305	n/a		1.50	458
0.048	1.22	0.15	46	0.55	168	n/a		1.10	335	n/a		1.65	503
0.054	1.37	0.20	61	0.60	183	n/a		1.20	366	n/a		1.80	549
0.062	1.57	0.20	61	0.65	198	n/a		1.20	366	n/a		1.80	549
0.072	1.83	0.20	61	0.65	198	n/a		1.20	366	n/a		1.80	549
0.076	1.93	0.25	76	0.70	214	60	183	1.40	427	1.00	305	2.10	641
0.080	2.03	0.25	76	0.70	214	60	183	1.40	427	1.00	305	2.10	641
0.092	2.34	0.28	85	0.75	229	60	183	1.50	458	1.00	305	2.25	686
0.099	2.51	0.28	85	0.80	244	60	183	1.60	488	1.00	305	2.40	732
0.106	2.69	0.30	92	0.80	244	60	183	1.60	488	1.00	305	2.40	732
0.120	3.05	0.30	92	0.85	259	60	183	1.70	519	1.00	305	2.55	778
0.135	3.43	0.30	92	0.85	259	60	183	1.70	519	1.00	305	2.55	778
0.148	3.76	0.35	107	0.90	275	60	183	1.80	549	1.00	305	2.70	824
0.162	4.11	0.35	107	0.90	275	60	183	1.80	549	1.00	305	2.70	824
0.177	4.50	0.44	134	0.90	275	60	183	1.80	549	1.00	305	2.70	824
0.192	4.88	0.50	153	1.00	305	60	183	2.00	610	1.00	305	3.00	915
0.207	5.26	0.53	162	1.00	305	60	183	2.00	610	1.00	305	3.00	915
and larger													

Tensile Strength for Temer Designation

Wire Diameter in[mm]		Soft, ksi[MPa]		Medium, ksi[MPa]		Hard, ksi[MPa]	
0.035 to under 0.080	0.20 to under 2.00	75	515	70 to 100	485 to 690	90 to 120	820 to 825
0.080 to under 0.106	2.00 to under 2.50	75	515	70 to 95	485 to 655	85 to 115	585 to 795
0.106 to 0.176	2.50 to under 4.70 incl	70	485	65 to 90	450 to 620	80 to 110	550 to 760
Over 0.176	[4.70]	70	485	60 to 85	415 to 585	75 to 105	515 to 725

Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire or Stand

ASTM B802

ASTM B802 TABLE 1 Zn-5Al-MM Alloy Coating		
Specification Diameter of Coated Wire,in.	Area Density of Coating,min,oz/ft ² of Uncoated Wire Surface	
	Class A	Class B
0.0500 to 0.0599, incl	0.60	1.80
0.0600 to 0.0749, incl	0.65	1.95
0.0750 to 0.0899, incl	0.70	2.10
0.0900 to 0.1039, incl	0.75	2.25
0.1040 to 0.1199, incl	0.80	2.40
0.1200 to 0.1399, incl	0.85	2.55
0.1400 to 0.1799, incl	0.90	2.70
0.1800 to 0.1900, incl	1.00	3.00

Tensile Requirements						
Specified Diameter,in.	Stress at1% Extension,min,Ksi		Ultimate Tensile Strength,min,Ksi		Elongation in 10 in.,min,%	
	Class A	Class C	Class A	Class C	Class A	Class C
0.0500 to 0.0899, incl	190	170	210	190	3.0	3.0
0.0900 to 0.1199, incl	185	165	205	185	3.5	3.0
0.1200 to 0.1399, incl	180	160	205	185	4.0	3.0
0.1400 to 0.1900, incl	170	155	200	180	4.0	4.0

ASTM B803

Tensile Requirements			
Specified Diameter in.	Stress at 1% Extension,min ksi	Ultimate Tensile Strength,min ksi	Elongation in 10 in.,min %
0.0500 to 0.0899,incl	210	235	3
0.0900 to 0.1199,incl	205	230	3
0.1200 to 0.1399,incl	200	225	3.5
0.1400 to 0.1900,incl	195	220	3.5

Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire or Strand

ASTM B958/B958M

Extra-High-Strength Tensile Requirements			
Specified Diameter in.	Stress at 1% Extension,min kpsi	Ultimate Tensile Strength,min kpsi	Elongation in 10 in.,min %
0.0500 to 0.0899,incl	225	265	3
0.0900 to 0.1199,incl	220	260	3
0.1200 to 0.1399,incl	215	255	3.5
0.1400 to 0.1900,incl	210	250	3.5

Extra-High-Strength Tensile Requirements			
Specified Diameter in.	Stress at 1% Extension,min kpsi	Ultimate Tensile Strength,min kpsi	Elongation in 10 in.,min %
0.0500 to 0.0899,incl	230	285	3
0.0900 to 0.1199,incl	225	275	3
0.1200 to 0.1399,incl	220	270	3.5
0.1400 to 0.1900,incl	215	265	3.5

Steel Strand for Prestressed Concrete

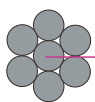


APPLICATIONS

It is suitable for prestressed concrete and similar purposes

STANDARD

Produced according to standard ASTM A416/A416M or specific requirements from customers



Galvanized Steel Wire

Steel Strand for Prestressed Concrete

ASTM A416/A416M

Breaking Strength Requirements			
Nominal Diameter of Strand, in. [mm]	Minimum Breaking Strength of Strand, lbf [kN]	Steel Area of Strand, in.2 [mm2]	Weight [Mass] of Strand lb/1000 ft [kg/1000 m]
Grade 250 [1725]			
0.250 [6.4]	9 000 [40.0]	0.036 [23]	122 [182]
0.313 [7.9]	14 500 [64.5]	0.058 [37]	197 [294]
0.375 [9.5]	20 000 [89.0]	0.080 [52]	272 [405]
0.438 [11.1]	27 000 [120]	0.108 [69.7]	367 [548]
0.500 [12.7]	36 000 [160]	0.144 [92.9]	490 [730]
0.600 [15.2]	54 000 [240]	0.216 [139]	737 [1090]
Grade 270 [1860]			
0.375 [9.53]	23 000 [102]	0.085 [55]	290 [430]
0.438 [11.1]	31 000 [138]	0.115 [74.2]	390 [580]
0.500 [12.7]	41 300 [184]	0.153 [98.7]	520 [780]
0.520 [13.2]	45 000 [200]	0.167 [108]	570 [840]
0.563 [14.3]	51 700 [230]	0.192 [124]	650 [970]
0.600 [15.2]	58 600 [261]	0.217 [140]	740 [1100]
0.620 [15.7]	62 800 [279]	0.231 [150]	780 [1200]
0.700 [17.8]	79 400 [353]	0.294 [190]	1000 [1500]

