



This category includes wire ropes in sizes as small as 1/32" in diameter. They're used in a variety of applications, including control cables, window and door closures, different kinds of remote control systems, boat rigging and many others.

They can be made of galvanized or stainless steel aircraft wire.

Each of these products is carefully engineered and fabricated to uniform size and quality. For example, 1/16" 7 x 19 contains 133 separate wires, making the wires approximately the diameter of a

human hair. Yet the rope has high strength, bendability and fatigue resistance.

These ropes are produced for the most common applications in the market. Utility grade is made to RRW.410D. These cables have historically been called "aircraft" cable. Since most applications do not require that designation, we are changing the name to "utility" cable. We can provide these ropes to MIL-W-83420 "aircraft" specifications on request. They require special lubrication, internal marking and fatigue testing.

Nominal strengths and weights for 7x7 utility cable.

GALVANIZED OR STAINLESS STEEL			
Diameter (in.)	Approx. wt. / 100 ft. (lbs.)	Nominal strength (lbs.)	
		Galvanized	Stainless
1/32*	0.16	110	110
3/64	0.42	270	270
1/16	0.75	480	480
5/64	1.1	650	650
3/32	1.6	920	920
7/64	2.2	1,260	1,260
1/8	2.8	1,700	1,700
5/32	4.3	2,600	2,400
3/16	6.2	3,700	3,700
7/32	8.3	4,800	4,800
1/4	10.6	6,100	6,100
9/32	13.4	7,600	7,600
5/16	16.7	9,200	9,000
3/8	23.6	13,100	12,000

Nominal strengths and weights for 7x19 utility cable.

GALVANIZED OR STAINLESS STEEL			
Diameter (in.)	Approx. wt. / 100 ft. (lbs.)	Nominal strength (lbs.)	
		Galvanized	Stainless
1/16	0.75	480	480
3/32	1.7	1,000	920
7/64	2.2	1,400	1,260
1/8	2.9	2,000	1,760
5/32	4.5	2,800	2,400
3/16	6.5	4,200	3,700
7/32	8.6	5,600	5,000
1/4	11.0	7,000	6,400
9/32	13.9	8,000	7,800
5/16	17.3	9,800	9,000
11/32	20.7	12,500	—
3/8	24.3	14,400	12,000

*1/32 is made in 3 x 7 construction.

Galvanized strand products.

Our galvanized strand products meet or exceed ASTM Specifications A475 and ASTM A363. Strands are tested for:

- Minimum breaking strength.
- Elongation (High Strength 5%; Extra High Strength and Utilities Grade 4%).
- Individual wire tolerances.
- Wire coating weight - ASTM Method A90.
- Wire wrap test for coating adherence.
- Wire wrap test for steel ductility.
- Preforming check.

Physical properties of zinc-coated steel wire strand.

Nominal diameter of strand (in.)	Number of wires	Nominal diameter of coated wires (in.)	Approx. wt. of strand (lb. / 1000 ft.)	MINIMUM BREAKING STRENGTH OF STRAND (LBS.)		
				Utilities Grade	High Strength Grade	Extra-High Strength Grade
3/16	7	.062	73	—	2,850	3,990
7/32	7	.072	98	—	3,850	5,400
1/4	7	.080	121	—	4,750	6,650
9/32	7	.093	164	—	6,400	8,950
5/16	7	.104	205	—	8,000*	11,200*
3/8	7	.120	273	11,500*	10,800*	15,400*
7/16	7	.145	399	18,000	14,500*	20,800*
1/2	7	.165	517	25,000	18,800*	26,900*
1/2	19	.100	504	—	19,100	26,700
9/16	7	.188	671	—	24,500	35,000
9/16	19	.113	637	—	24,100	33,700
5/8	7	.207	813	—	29,600	42,400
5/8	19	.125	796	—	28,100	40,200
3/4	19	.150	1,155	—	40,800	58,300
7/8	19	.177	1,581	—	55,800	79,700
1	19	.200	2,073	—	73,200	104,500
1 1/8	37	.161	2,691	—	91,600	130,800
1 1/4	37	.179	3,248	—	113,600	162,200

*ASTM A 363 (weldless) is also available in these sizes and grades upon request.