GUY and MESSENGER STRAND

Zinc coated guy or messenger strand is produced to comply with applicable ASTM Specifications A-475 and A-363 in Class A and Class B coating weight.

ELONGATION REQUIREMENTS FOR GRADES OF STRAND

Grade of Strand	Elongation in 24 in. (610 mm), min, percent
Utilities Grade (1) and Common Strand	10
Utilities Grade (2) and Siemens-Martin	8
Utilities Grade (3) and High-Strength	5
Utilities Grade (4) and Extra-High Strength	4

7-WIRE GALVANIZED STEEL STRAND CLASS A AND B COATING

STRAND SIZE INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1,000 FT	MINIMUM STRENGTH IN POUNDS
SIEMENS-MARTIN			
1/4	.080	121	3,150
5/16	.104	205	5,350
3/8	.120	273	6,950
7/16	.145	399	9,350
1/2	.165	517	12,100
5/8	.207	813	19,000
HIGH STRENGTH			
3/16	.062	72.9	2,850
1/4	.080	121	4,750
5/16	.104	205	8,000
3/8	.120	273	10,800
7/16	.145	399	14,500
1/2	.165	517	18,800
9/16	.188	671	24,500
EXTRA HIGH STRENGTH			
3/16	.062	72.9	3,990
1/4	.080	121	6,650
5/16	.104	205	11,200
3/8	.120	273	15,400
7/16	.145	399	20,800
1/2	.165	517	26,900
9/16	.188	671	35,000
UTILITIES			
5/16	.109	225	6,000
3/8	.120	273	11,500
7/16	.145	399	18,000
1/2	.165	517	25,000

19-WIRE GALVANIZED STEEL STRAND CLASS A AND B COATING

STRAND SIZE INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1,000 FT.	MINIMUM STRENGTH IN POUNDS
SIEMENS-MARTIN			
1/2	.100	504	12,700
9/16	.113	637	16,100
5/8	.125	796	18,100
3/4	.150	1,155	26,200
7/8	.177	1,581	35,900
1	.200	2,073	47,000
HIGH STRENGTH			
1/2	.100	504	19,100
9/16	.113	637	24,100
5/8	.125	796	28,100
3/4	.150	1,155	40,800
7/8	.177	1,581	55,800
1	.200	2,073	73,200
EXTRA HIGH STRENGTH			
1/2	.100	504	26,700
9/16	.113	637	33,700
5/8	.125	796	40,200
3/4	.150	1,155	58,300
7/8	.177	1,581	79,700
1	.200	2,073	104,500

GUY STRAND SUBSTITUTION CHART

SIZE & GRADE	MIN. BREAKING STRENGTH PER ASTM A-475	POTENTIAL SUBSTITUTION	MIN. BREAKING STRENGTH PER ASTM A-475	POTENTIAL SAVINGS
1/2 UTIL	25,000 lbs.	1/2 EHS	26,900 lbs.	2%
1/2 HS	18,800 lbs.	7/16 EHS	20,800 lbs.	22%
1/2 SM	12,100 lbs.	3/8 EHS	15,400 lbs.	43%
7/16 UTIL	18,000 lbs.	7/16 EHS	20,800 lbs.	3%
7/16 HS	14,500 lbs.	3/8 EHS	15,400 lbs.	27%
7/16 SM	9,350 lbs.	5/16 EHS	11,200 lbs.	39%
3/8 UTIL	11,500 lbs.	5/16 EHS[1]	11,200 lbs.	21%
3/8 HS	10,800 lbs.	5/16 EHS	11,200 lbs.	17%
3/8 SM	6,950 lbs.	5/16 HS	8,000 lbs.	20%
5/16 UTIL	6,000 lbs.	1/4 EHS	6,650 lbs.	19%
5/16 SM	5,350 lbs.	1/4 EHS	6,650 lbs.	37%

[1] Note: 5/16 EHS has 300 lbs. less breaking strength than 3/8 UTIL.

This chart is not an engineering document. It is designed to show what substitutions might be made and an estimate of the potential cost savings. Specifications should be checked carefully to insure that the size and grade chosen meets all requirements of the design prior to a substitution being made.