

# Alumoweld® Type M Guy Strand

Alumoweld Type M Guy Strand is an economical, corrosion resistant guying material for use on overhead line structures. The thick cladding of aluminum on each wire protects the high-strength steel core from rusting and subsequent loss of strength. Costly maintenance is eliminated, and the original safety factor of the guy is maintained throughout the life of the line.

## Features

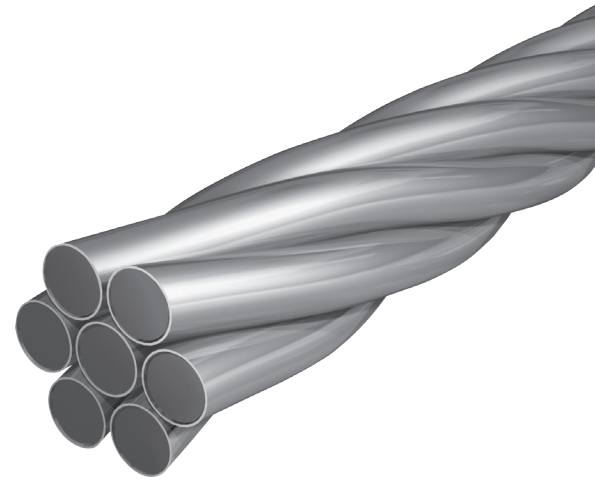
### Thick Aluminum Cladding

The Alumoweld wire used to make Type M guy strand is unique in that the aluminum cladding thickness is guaranteed to be no less than 10% minimum of the wire radius. This, a thick corrosion barrier, that is pure aluminum not zinc or an iron-aluminum alloy, protects the steel core.

Another important feature of any coated or clad wire is the bond between the coating material and the base metal. In the case of Alumoweld wire, and aluminum cladding and steel core are joined by a continuous ductile weld. This assures against cracking or separation of the protective aluminum from the steel core.

### Lightweight and Convenient

Directly related to strength and sag performance is the lighter weight of Alumoweld Type M Guy Strand. This lighter weight, combined with high strength, permits Alumoweld to be installed to the same sags as steel with correspondingly lower tensions and lower stresses on the towers or supporting structures.



## Applications

- Power lines
- Telephone lines
- Railway signals
- Communication lines
- Towers Masts

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# Alumoweld® Type M Guy Strand (cont.)

## Physical Characteristics

Strand Designation	Nominal Diameter of Strand		Number of Individual Wires	Diameter of Individual Wires		Breaking Load		Weight		Approximate Resistance <sup>2</sup>	
	in.	mm		in.	mm	lbs	kg	lbs/1000 ft	kg/km	Ohms/1000 ft	Ohms/km
2.8M3	0.174	4.42	3	0.081	2.06	2,800	1,270	44	65.47	2.62	8.60
4M3	0.220	5.59	3	0.102	2.59	4,000	1,814	70	104	1.65	5.41
5M3	0.247	6.27	3	0.114	2.90	5,700	2,585	89	132	1.31	4.30
6M	0.242	6.15	7	0.081	2.06	6,000	2,721	104	155	1.13	3.71
7M3	0.277	7.04	3	0.128	3.25	7,200	3,265	112	167	1.04	3.41
8M	0.272	6.91	7	0.091	2.31	8,000	3,629	131	195	0.89	2.92
10M	0.306	7.77	7	0.102	2.59	10,000	4,536	165	246	0.71	2.33
12.5M	0.343	8.71	7	0.114	2.90	12,500	5,670	208	310	0.56	1.84
14M	0.363	9.22	7	0.121	3.07	14,000	6,350	232	345	0.50	1.64
16M	0.386	9.80	7	0.128	3.25	16,000	7,257	262	390	0.45	1.48
18M	0.417	10.60	7	0.139	3.53	18,000	8,164	306	455	0.38	1.25
19M <sup>3</sup>	0.433	11.00	7	0.144	3.67	19,000	8,618	330	491.10	0.35	1.16
20M	0.444	11.30	7	0.148	3.76	20,000	9,072	347	517	0.34	1.12
25M	0.519	13.20	7	0.173	4.39	25,000	11,340	475	707	0.25	0.82

1. Unless otherwise noted, the above guy strands are manufactured per Alumoweld Specification ER-3008.

2. For information only, not for calculation purposes.

3. Per ASTM B-416.

## Qualifications

Standard Code	Component
ER-3008	Alumium Clad Steel Wire (ACS wire)

Contact AFL for your Alumoweld solution.