Power Utilities market

Power Utilities Strand Solutions

Guy Strand | Static Wire | Barbed Staples

Why choose Bekaert for power utilities strand solutions?

When power plants generate electricity, that energy has to travel from that site to the utility company's consumers. The electricity grid is a complex system consisting of electricity substations, power lines, utility poles, and other elements. In order to ensure the longevity of the system, it is important to protect and stabilize the power lines, and utility poles by using guy strands and static wires.
Guy strands stabilize utility poles, while static wires protect and redirect energy from lightning strikes and carry the current away from power lines. Barbed staples are also needed to fasten static wires to wood poles and crossbars.

Bekaert is more than steel wires supplier. With comprehensive customer service, we can connect you with industry-leading expertise and the guy strand, static wire and barbed staple you need for your project.

1. Guy Strand

Our strength in guy strand is in our extensive coating range. Prevent rust with the right coating that meets your specifications. Bekaert provides standardized and certified Class A, B and C galvanized wire that meets the ASTM-A475 standard.

For superior corrosion resistance Bekaert offers strands coated with Bezinal®, an advanced zinc aluminum coating that meets the CAN/CSA-G12standard.

2. Static Wire

Bekaert can manufacture static wires according to your application's unique specifications, including standard CAN/CSA-G12 products. Our multiple manufacturing facilities are flexible, allowing us to produce customized steel static wires near your region. Bekaert engineers and technicians have complete control over the manufacturing processes to ensure the highest quality control standards for your products.

3. Barbed Staples

Bekaert offers premium staples to deliver the strength you need for your work. Our 8-gram Bezinal® coated wire staples are available in plastic buckets of 8 pounds and 50 pounds to meet your project requirements. We offer our barbed utility staples with single or double barbs. If you need an even stronger hold, we also provide 9-gram galvanized knurled staples available in 50-pound buckets.

Guy Strand Datasheet

Steel guy strand comes in a variety of strengths, lengths and wires per strand to secure many of the largest man-made structures, including transmission and distribution systems, At Bekaert, we offer a variety of strengths, coatings, and specifications including CSA-G12 for the Canada market.

Specifications [imperial, per CAN/CSA-G12 (Latest Edition)]

Designated strand size (in)	Nominal strand wire diameter (in)	Nominal wire diameter (in*)	Nominal metallic cross-sectional area of the strand (in²)	Number of wires	Approx. weight (lb/1000 ft)	Minimum breaking strength, lb				Minimum weight of zinc-coating (oz/ft²)		
						Grade 110	Grade 160	Grade 180	Grade 220	Class A	Class B	Class C
3/16	0.195	0.065	0.0230	7	79.0	2,400	3,500	4,000	4,800	0.50	1.00	1.50
1/4	0.249	0.083	0.0380	7	129	3,900	5,700	6,400	7,900	0.60	1.20	1.80
9/32	0.285	0.095	0.0500	7	169	5,200	7,500	8,500	10,300	0.70	1.40	2.10
5/16	0.327	0.109	0.0650	7	223	6,800	9,900	11,100	13,600	0.80	1.60	2.40
3/8	0.36	0.12	0.0790	7	270	8,200	12,000	13,500	16,500	0.85	1.70	2.55
7/16	0.432	0.144	0.114	7	389	11,900	17,300	19,500	23,800	0.90	1.80	2.70
1/2	0.495	0.165	0.150	7	511	15,600	22,700	25,500	31,200	0.90	1.80	2.70
9/16	0.564	0.188	0.194	7	664	20,300	29,500	33,200	40,600	1.00	2.00	3.00
5/8	0.621	0.207	0.235	7	813	24,600	35,800	40,200	49,200	1.00	2.00	3.00
9/16	0.569	0.113/0.117	0.191	19	657	18,900	27,500	30,900	37,800	0.80	1.60	2.40
5/8	0.634	0.125/0.134	0.235	19	806	23,000	33,600	37,700	46,100	0.85	1.70	2.55
11/16	0.688	0.136/0.144	0.278	19	954	27,500	40,000	45,000	55,000	0.85/0.90	1.70/1.80	2.55/2.70
3/4	0.762	0.150/0.162	0.339	19	1,163	33,500	48,700	54,800	67,000	0.90	1.80	2.70
13/16	0.815	0.161/0.171	0.389	19	1,338	38,700	56,000	63,100	77,100	0.90	1.80	2.70
7/8	0.894	0.177/0.186	0.470	19	1,613	46,200	67,300	75,700	92,500	0.90	1.80	2.70
15/16	0.94	0.186/0.196	0.519	19	1,784	51,400	74,700	84,100	102,800	0.90/1.00	1.80/2.00	2.70/3.00

*In the construction of 19-wire strands, the smaller nominal wire size applies to the 6 and 12-wire layers and the larger nominal wire size applies to the center wire.

Specifications [SI Units, per CAN/CSA-G12 (Latest Edition)]

Designated strand size (mm)	Nominal strand wire diameter (mm)	Nominal wire diameter (mm*)	Nominal metallic cross-sectional area of the strand (mm²)	Number of wires	Approx. weight (kg/1000m)	Minimum breaking strength, kN				Minimum weight of zinc-coating (g/m²)		
						Grade 800	Grade 1100	Grade 1300	Grade 1500	Class A	Class B	Class C
5	5.10	1.70	15.9	7	130	12.0	16.5	19.5	22.5	150	300	450
6	6.30	2.10	24.2	7	190	18.0	25.0	30.0	34.5	150	300	450
7	7.20	2.40	31.7	7	250	24.0	33.0	39.0	45.0	180	360	540
8	8.40	2.80	43.1	7	340	33.0	45.0	53.0	61.5	244	488	730
9	9.00	3.00	49.5	7	390	37.5	52.0	61.0	70.5	244	488	730
10	10.8	3.60	71.3	7	560	54.0	74.5	88.0	102	259	519	780
12	12.6	4.20	97.0	7	760	74.0	101	120	138	275	549	825
14	14.4	2.80/3.20	119	19	930	85.5	118	139	161	244/259	488/519	730/780
16	16.2	3.20/3.40	154	19	1,210	110	152	180	208	259	519	780
18	18.2	3.60/3.80	195	19	1,530	140	193	228	263	259/275	519/549	780/825
20	20.2	4.00/4.20	240	19	1,890	173	238	281	324	275	549	825
22	22.2	4.40/4.60	290	19	2,280	209	287	340	392	275	549	825
24	24.2	4.80/5.00	345	19	2,710	249	342	404	466	305	610	915

*In the construction of 19-wire strands, the smaller nominal wire size applies to the 6 and 12-wire layers and the larger nominal wire size applies to the center wire.

Static Wire Datasheet

Static wire, or overhead ground wire, is a form of lightning protection for power and data transmission lines. Provide reliable support with Bekaert durable and high-quality steel static strand. Bekaert offers a variety of strengths and coatings and specifications including CSA-G12 for the Canada market.

Specifications [imperial, per CAN/CSA-G12 (Latest Edition)]

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						Grade 800	Grade 1100	Grade 1300	Grade 1520	Class A	Class B	Class C
5	5.10	1.70	15.9	7	130	12.0	16.5	19.5	22.5	150	300	450
6	6.30	2.10	24.2	7	190	18.0	25.0	30.0	34.5	150	300	450
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Barbed Staples Datasheet

Our premium staples for the utilities market have been optimized to secure stranded products such as the ground wire on transmission and distribution lines. Bekaert's staples are available in short length staples for hardwood posts or longer lengths for softwood species.

Description	Part #	Gauge	Class	Packaging
Knurled 1.25"	118323	9	Galvanized	50 lbs boxes
Knurled 1.5"	118324	9	Galvanized	50 lbs boxes
Knurled 1.75"	118325	9	Galvanized	50 lbs boxes
Double barbed 1.5"	187237	8	Bezinal®	8 lbs bucket x 6
Double barbed 1.5"	147613	8	Bezinal®	50 lbs boxes
Double barbed 1.75"	18724 4	8	Bezinal®	8 lbs bucket x 6
Double barbed 1.75"	187260	8	Bezinal®	50 lbs boxes
Double barbed 2"	187246	8	Bezinal®	8 lbs bucket x 6
Double barbed 2"	1628337	8	Bezinal®	50 lbs boxes
Barbed 1.25"	187235	8	Bezinal®	8 lbs bucket x 6
Barbed 1.25"	187255	8	Bezinal®	50 lbs boxes
Non-barbed 1.5"	197594	8	Bezinal®	8 lbs bucket x 6

Made in the USA

Contact us

More Information?

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