



Betelguard Titanium Anode Mesh 300 is a key component for Cathodic Protection systems in reinforced concrete structures. It is composed of a precious metal oxide catalyst sintered to an expanded titanium mesh substrate.

Anode Performance

Current rating at 110 mA/m ² (10 mA/ft ²):	37.8 mA/m ² (3.44 mA/ft ²)
Expected life (NACE Standard TM02944-94):	100 years
Catalyst:	Mixed Metal Oxide
Maximum anode concrete interface current density:	
FHWA limit	110 mA/m ² (10 mA/ft ²)
Short-term limit	220 mA/m ² (20 mA/ft ²)

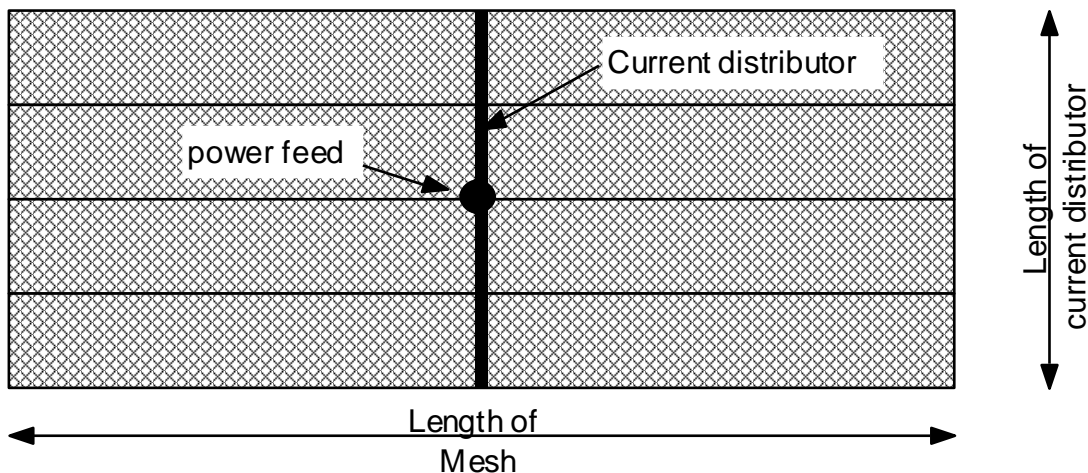
Dimensions

Width of roll:	1.22 m (4 ft)
Length of roll:	76 m (250 ft)
Area per roll:	92.9 m ² (1,000 ft ²)
Actual anode surface per unit area of concrete:	0.34 m ² /m ² (0.34 ft ² /ft ²)
Expanded thickness:	1.981 mm (0.078")
Diamond dimensions	25 mm x 51 mm x 0.89 mm (0.923" x 2" x .035")

Electrical Properties

Anode resistance lengthwise	0.027 ohm/m (0.008 ohm/ft)
Resistance widthwise w/ current distributor	.0013 ohm/m (0.004 ohm/ft)

Betelguard Titanium Anode Mesh 300



When the power feed is at the center of a rectangular area, as shown above, proper anode design may be obtained from the tables below. This layout constitutes a building block for larger structures which should be subdivided into elements which fit the constraints of the tables below.

Metric Units

Length of Mesh (meter)	Length of Current Distributor (widths of mesh / meter)	Area (m ²)
43.2	4 / 4.88	207
40.9	5 / 6.10	246
38.4	6 / 7.32	276
35.6	7 / 8.54	299
32.7	8 / 9.76	314
29.8	9 / 10.98	321
26.9	10 / 12.20	323
24.3	11 / 13.42	320
21.8	12 / 14.64	314
19.5	13 / 15.86	305
17.5	14 / 17.08	294
15.7	15 / 18.30	283
14.1	16 / 19.52	271
12.8	17 / 20.74	260
11.5	18 / 21.96	249
10.5	19 / 23.18	239
9.5	20 / 24.40	229
8.7	21 / 25.62	219
8.0	22 / 26.84	210

English Units

Length of Mesh (feet)	Length of Current Distributor (widths of mesh / feet)	Area (ft ²)
143	4 / 16	2,287
135	5 / 20	2,702
126	6 / 24	3,028
117	7 / 28	3,263
107	8 / 32	3,410
97	9 / 36	3,480
87	10 / 40	3,483
78	11 / 44	3,436
70	12 / 48	3,353
62	13 / 52	3,246
56	14 / 56	3,126
50	15 / 60	3,000
45	16 / 64	2,873
40	17 / 68	2,749
37	18 / 72	2,630
33	19 / 76	2,516
30	20 / 80	2,409
27	21 / 84	2,309
25	22 / 88	2,215