

Expanding Anchor Load Capacity

Expanding Anchor Ultimate Load Capacity Table

Catalog Number	Hole Size (inches)	Area (sq. inches)	Rod Size (inches)	Holding Strength (lbs-force) Soil Class 3 *	Holding Strength (lbs-force) Soil Class 4 *	Holding Strength (lbs-force) Soil Class 5	Holding Strength (lbs-force) Soil Class 6	Holding Strength (lbs-force) Soil Class 7
J0870	6	70	1/2 or 5/8	16,000	14,000	11,000	8,500	5,000
J8115	8	115	5/8 or 3/4	23,000	20,500	17,000	14,000	9,000
J8135	8	135	5/8 or 3/4	23,000	22,000	18,500	15,000	10,000
J8135-1	8	135	1	26,500	22,000	18,500	15,000	10,000
J8200-1	10	200	1	31,000	23,000	21,000	16,500	12,000
J8200-3/4	10	200	5/8 or 3/4	23,000	23,000	21,000	16,500	12,000
J0283	12	300	1-1/4	36,000	34,000	26,500	21,500	16,000
J0283-1	12	300	1	36,000	34,000	26,500	21,500	16,000

Note: * Anchor load capacity may be limited by the rod rating. Installing procedures and embedment depth must be followed to assure the anchor load capacity. Order rod separately. Rod ratings are: 5/8" diameter = 16,000 lbs-force, 3/4" diameter = 23,000 lbs-force, 1" diameter = 36,000 lbs, 1-1/4" diameter = 54,000 lbs-force, ultimate, respectively. Must use MPS anchor and rod to assure fit and load capacity.

Expanding Anchor Ultimate Load Capacity Table (metric)

Catalog Number	Hole Size (cm)	Area (sq. cm)	Rod Size (cm)	Holding Strength (kilogram-force) Soil Class 3 *	Holding Strength (kilogram-force) Soil Class 4 *	Holding Strength (kilogram-force) Soil Class 5	Holding Strength (kilogram-force) Soil Class 6	Holding Strength (kilogram-force) Soil Class 7
J0870	15.2	452	1.3 or 1.6	7,257	6,350	4,990	3,856	2,268
J8115	20.3	742	1.6 or 1.9	10,432	9,299	7,711	6,350	4,082
J8135	20.3	871	1.6 or 1.9	10,432	9,979	8,391	6,804	4,536
J8135-1	20.3	871	2.5	12,020	9,979	8,391	6,804	4,536
J8200-1	25.4	1290	2.5	14,061	12,020	9,525	7,454	5,443
J8200-3/4	25.4	1290	1.6 or 1.9	10,432	10,432	9,525	7,484	5,443
J0283	30.5	1936	3.2	16,329	15,422	12,020	9,752	7,257
J0283-1	30.5	1936	2.5	16,329	15,422	12,020	9,752	7,257

Note: *Anchor load capacity may be limited by the rod rating. Installing procedures and embedment depth must be followed to assure the anchor load capacity. Order rod separately. Rod ratings are: 1.6 cm diameter = 7,257 kg-force, 1.9 cm diameter = 10,432 kg-force, 2.5 cm diameter = 16,329 kg-force, 3.2 cm diameter = 24,439 kg-force, ultimate, respectively. Must use MPS anchor and rod to assure fit and load capacity.



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Soil Classification Table

Soil Class	Common Soil-Type Description	Geological Soil Classification	Typical Blow Count "N" per ASTM-D1586
0	Sound hard rock, unweathered	Granite, Basalt, Massive Limestone	N.A. ROD = 50-1/2
1	Very dense and/or cemented sands; coarse gravel and cobbles	Caliche, (Nitrate-bearing gravel/rock)	60-100+
2	Dense Fine sand; very hard silts and clays (may be preloaded)	Basal till; boulder clay; caliche; weathered laminated rock	45-60
3	Dense clays, sands and gravel; hard silts and clays	Glacial till; weathered shales, schist, gneiss and siltstone	35-50
4	Medium dense sandy gravel; very stiff to hard silts and clays	Glacial fill; hardpan; marls	24-40
5	Medium dense coarse sand and sandy gravels; stiff to very stiff silts and clays	Saprolites, residual soils	14-25
6	Loose to medium dense fine to coarse sand; firm stiff clays and silts	Dense hydraulic fill; compacted fill; residual soils	7-14
7**	Loose fine sand; Alluvium; loess; soft-firm clays; varied clays; fill	Flood plain soils; lake clays; adobe; gumbo, fill	4-8
8**	Peat, organic silts; inundated silts, fly ash	Miscellaneous fill, swamp marsh	0-5

