

This chart is based on the Engineering News Record (ENR) formula for pile bearing capacity and is provided as a convenience only.

**Pile bearing (Tons) =  $2E/(S + 0.1)/2000$**  , where  $E$  = Hammer energy (given by the Saximeter formula)  
 $S$  = Pile set (inch per blow)

Blow per Minute	Ram Stroke (ft)	Hammer Energy (lb.ft)	Pile Set (Blows per inch)											
			1	2	3	4	5	6	7	8	9	10	11	12
35	11.52	32,517	30	54	75	93	108	122	134	145	154	163	170	177
36	10.88	30,689	28	51	71	88	102	115	126	136	145	153	161	167
37	10.28	29,007	26	48	67	83	97	109	119	129	137	145	152	158
38	9.73	27,457	25	46	63	78	92	103	113	122	130	137	144	150
39	9.22	26,024	24	43	60	74	87	98	107	116	123	130	136	142
40	8.75	24,697	22	41	57	71	82	93	102	110	117	123	129	135
41	8.32	23,466	21	39	54	67	78	88	97	104	111	117	123	128
42	7.91	22,322	20	37	52	64	74	84	92	99	106	112	117	122
43	7.53	21,257	19	35	49	61	71	80	88	94	101	106	111	116
44	7.18	20,264	18	34	47	58	68	76	83	90	96	101	106	111
45	6.85	19,336	18	32	45	55	64	73	80	86	92	97	101	105
46	6.54	18,468	17	31	43	53	62	69	76	82	87	92	97	101
47	6.26	17,655	16	29	41	50	59	66	73	78	84	88	92	96
48	5.99	16,892	15	28	39	48	56	63	70	75	80	84	88	92
49	5.73	16,176	15	27	37	46	54	61	67	72	77	81	85	88
50	5.49	15,501	14	26	36	44	52	58	64	69	73	78	81	85
51	5.27	14,867	14	25	34	42	50	56	61	66	70	74	78	81
52	5.06	14,268	13	24	33	41	48	54	59	63	68	71	75	78

**Caution:** Driving at more than 20 blows per inch (set of 0.05 inch per blow) is considered practical refusal.

This chart is based on the Engineering News Record (ENR) formula for pile bearing capacity and is provided as a convenience only.

**Pile bearing (kN) =  $100E/(S + 0.254)/6$ ,** where **E** = Hammer energy (given by the Saximeter formula)  
**S** = Pile set (cm per blow)

Blows per Minute	Ram Stroke (m)	Hammer Energy (kJ)	Pile Set (Blows per 2cm)											
			5	6	7	8	9	10	11	12	13	14	15	16
35	3.51	44	1124	1252	1362	1459	1544	1620	1687	1748	1803	1853	1898	1940
36	3.32	42	1061	1182	1286	1377	1457	1529	1592	1650	1702	1749	1792	1831
37	3.13	39	1003	1117	1215	1302	1378	1445	1505	1559	1608	1653	1694	1731
38	2.97	37	949	1057	1151	1232	1304	1368	1425	1476	1523	1565	1603	1638
39	2.81	35	900	1002	1091	1168	1236	1296	1350	1399	1443	1483	1520	1553
40	2.67	34	854	951	1035	1108	1173	1230	1282	1328	1370	1408	1442	1474
41	2.54	32	812	904	983	1053	1115	1169	1218	1262	1301	1337	1370	1400
42	2.41	30	772	860	935	1002	1060	1112	1159	1200	1238	1272	1304	1332
43	2.30	29	735	819	891	954	1010	1059	1103	1143	1179	1212	1241	1269
44	2.19	28	701	780	849	909	963	1010	1052	1090	1124	1155	1183	1209
45	2.09	26	669	745	810	868	918	963	1004	1040	1072	1102	1129	1154
46	2.00	25	639	711	774	829	877	920	959	993	1024	1053	1079	1102
47	1.91	24	611	680	740	792	839	880	916	949	979	1006	1031	1054
48	1.83	23	584	651	708	758	802	842	877	908	937	963	987	1008
49	1.75	22	560	623	678	726	768	806	840	870	897	922	945	966
50	1.68	21	536	597	650	696	736	772	805	834	860	884	905	925
51	1.61	20	514	573	623	667	706	741	772	800	825	848	868	887
52	1.54	19	494	550	598	641	678	711	741	767	792	813	833	852

**Caution:** Driving at more than 8 blows per cm (set of 0.125 cm per blow) is considered practical refusal.