

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	20,323	18	34	47	58	68	76	84	90	96	102	106	111
36	10.88	19,181	17	32	44	55	64	72	79	85	91	96	100	105
37	10.28	18,130	16	30	42	52	60	68	75	81	86	91	95	99
38	9.73	17,161	16	29	40	49	57	64	71	76	81	86	90	94
39	9.22	16,265	15	27	38	46	54	61	67	72	77	81	85	89
40	8.75	15,436	14	26	36	44	51	58	64	69	73	77	81	84
41	8.32	14,667	13	24	34	42	49	55	60	65	69	73	77	80
42	7.91	13,952	13	23	32	40	47	52	57	62	66	70	73	76
43	7.53	13,286	12	22	31	38	44	50	55	59	63	66	70	72
44	7.18	12,665	12	21	29	36	42	47	52	56	60	63	66	69
45	6.85	12,085	11	20	28	35	40	45	50	54	57	60	63	66
46	6.54	11,543	10	19	27	33	38	43	48	51	55	58	60	63
47	6.26	11,034	10	18	25	32	37	41	45	49	52	55	58	60
48	5.99	10,558	10	18	24	30	35	40	43	47	50	53	55	58
49	5.73	10,110	9	17	23	29	34	38	42	45	48	51	53	55
50	5.49	9,688	9	16	22	28	32	36	40	43	46	48	51	53
51	5.27	9,292	8	15	21	27	31	35	38	41	44	46	49	51
52	5.06	8,918	8	15	21	25	30	33	37	40	42	45	47	49

**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	28	703	783	852	912	965	1012	1055	1093	1127	1158	1187	1213
36	3.32	26	663	739	804	861	911	955	995	1031	1064	1093	1120	1145
37	3.13	25	627	698	760	814	861	903	941	975	1005	1033	1059	1082
38	2.97	23	593	661	719	770	815	855	891	923	952	978	1002	1024
39	2.81	22	562	626	682	730	772	810	844	874	902	927	950	971
40	2.67	21	534	594	647	693	733	769	801	830	856	880	901	921
41	2.54	20	507	565	615	658	697	731	761	789	813	836	856	875
42	2.41	19	483	537	585	626	663	695	724	750	774	795	815	833
43	2.30	18	460	512	557	596	631	662	690	714	737	757	776	793
44	2.19	17	438	488	531	568	602	631	657	681	702	722	740	756
45	2.09	16	418	465	507	542	574	602	627	650	670	689	706	721
46	2.00	16	399	445	484	518	548	575	599	621	640	658	674	689
47	1.91	15	382	425	463	495	524	550	573	593	612	629	644	659
48	1.83	14	365	407	443	474	502	526	548	568	586	602	617	630
49	1.75	14	350	389	424	454	480	504	525	544	561	576	590	603
50	1.68	13	335	373	406	435	460	483	503	521	537	552	566	578
51	1.61	13	321	358	390	417	441	463	482	500	515	530	543	555
52	1.54	12	309	344	374	400	424	444	463	480	495	508	521	532

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