Soil Classification and Bearing Table

From CFR* 3285.202 - Manufactured Housing Installation

SOIL CLASSIFICATION		SOIL DESCRIPTION	ALLOWABLE PRESSURE	BLOW COUNT	TORQUE
Classification Number (5)	ASTM D 2487 or D 2488		Pounds Per Square Foot (1)	ASTM D 1586	Probe (3) Value (4) Inch Pounds
1		Rock or Hard Pan	4000		
2	GW,GP SW,SP,SG SM	Sandy gravel and gravel; very dense and/or cemented sands; course gravel/cobbles; preloaded silts, clays and corals	2000	40+	More than 550
3	GC,SC,ML	Sandy; silty sand; clayey sand; silty gravel; medium dense course sands; sandy gravel; and very stiff silt, sand clays	1500	24 - 39	351 - 550
4A	CG,MH(2)	Loose to Medium dense sands; firm to stiff clays and silts; alluvial fills	1000	18 - 23	276 - 350
4B	CH,MH(2)	Loose sands; firm clays; alluvial fills	1000	12 - 17	175 - 275
5	OL,OH,PT	Uncompacted fill; peat; organic clays	Refer to CFR* 3285.202(e)	0 - 11	Less than 175

¹⁾ The values provided in this table have been adjusted for overburden pressure, embedment depth, water table height, or settlement problems.

²⁾ For soils classified as CH or MH, without either torque probe values or blow count test results, selected anchors must be rated for a 4B soil.

³⁾ The torque probe is a device for measuring the torque value of soils to assist in valuating the holding capacity of the soil in which the ground anchor is placed The shaft must be of suitable length for the depth of the ground anchor.

⁴⁾ The torque value is measurement of the load resistance provided by the soil when subject to the turning or twisting force of the probe.

⁵⁾ The allowable pressure of 1500 psf may be used, unless the site specific information requires the use of lower values based on soil classification and type.

^{*} Code of Federal Regulations (CFR)