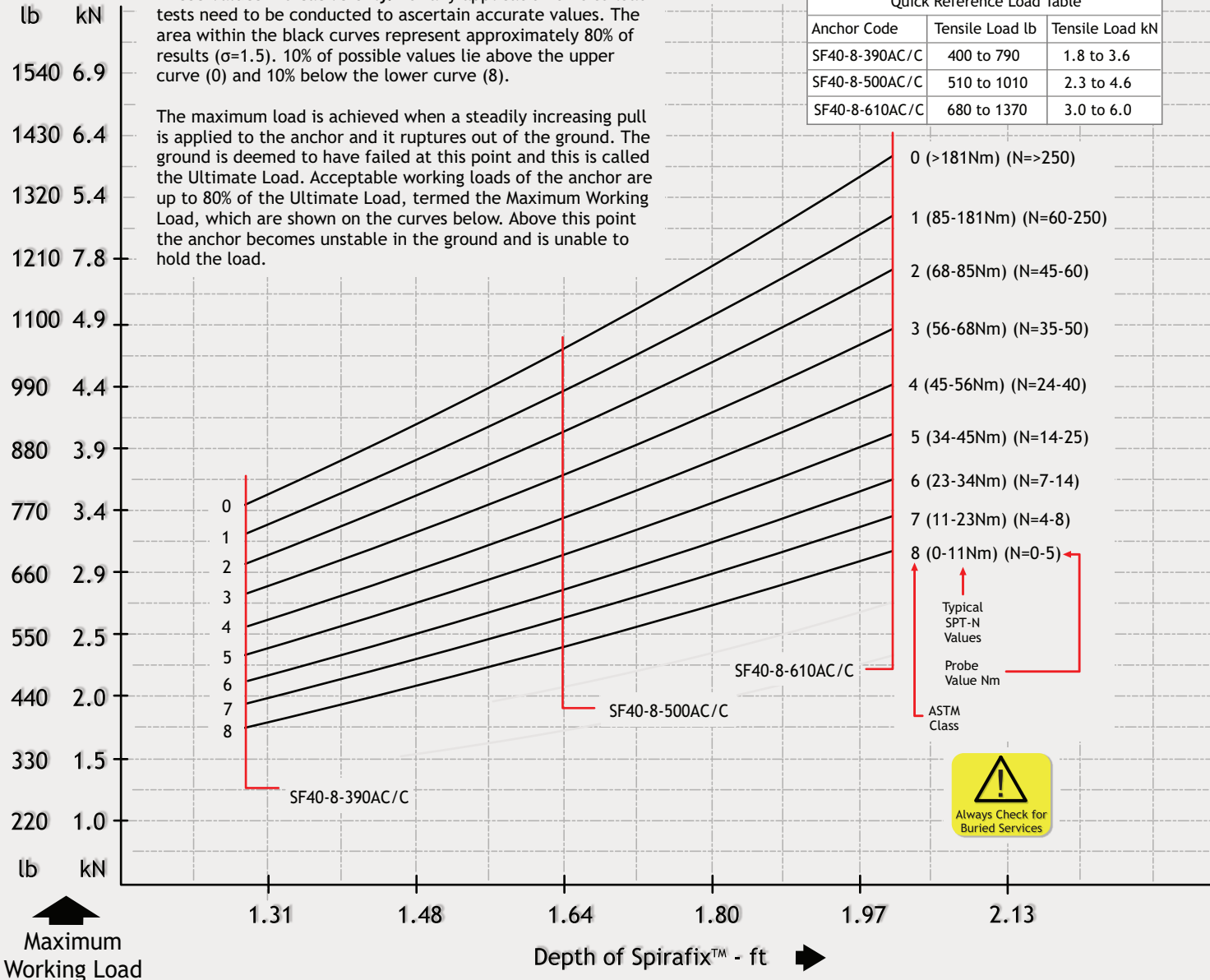


40mm Diameter Spirafix™ Vertical Maximum Working Tensile Loads

These values indicative only. For any application on-site load tests need to be conducted to ascertain accurate values. The area within the black curves represent approximately 80% of results ($\sigma=1.5$). 10% of possible values lie above the upper curve (0) and 10% below the lower curve (8).

The maximum load is achieved when a steadily increasing pull is applied to the anchor and it ruptures out of the ground. The ground is deemed to have failed at this point and this is called the Ultimate Load. Acceptable working loads of the anchor are up to 80% of the Ultimate Load, termed the Maximum Working Load, which are shown on the curves below. Above this point the anchor becomes unstable in the ground and is unable to hold the load.

Quick Reference Load Table		
Anchor Code	Tensile Load lb	Tensile Load kN
SF40-8-390AC/C	400 to 790	1.8 to 3.6
SF40-8-500AC/C	510 to 1010	2.3 to 4.6
SF40-8-610AC/C	680 to 1370	3.0 to 6.0



Soil Classification				
Basic Soil Type	Sub Group	Compaction/Strength	SPT-N	ASTM Class
Sands	Sand	Very Loose	0-3	8
		Loose	3-8	5
Compact		8-30	3	
Sands	Sandy Clay/Sandy Silt	Cemented	30-58	1
		Soft	3-8	5
Silt	Silt	Firm	8-30	3
		Stiff	30-58	1
	Silty Clay	Very Soft	7-14	6
		Soft	14-25	5
Clays	Clay	Firm	25-60	4
		Soft	7-14	6
		Stiff	14-25	5
	Clay	Very Stiff	25-60	4
		Hard	0-5	8
		Very Hard	4-8	7
Peats	Organic Clay	Firm	7-14	6
	Silt or Sand	Stiff	14-25	5
Peats	Peat	Spongy	35-60	3
	Plastic	Hard	>60	1
Chalks	Very Weak	Weak	0-5	8
			0-5	8
	Moderately Weak	Moderately strong to very strong	0-5	8
			0-5	8
Chalks	Moderately strong to very strong	0-25	6	
		25-100	2	
Chalks	Moderately strong to very strong	100-250	1	
		>250	0	

Notes:

The above classifications are outlined in BS 5930 with the exception of chalk and the "Sands" and "Clays" sections have been expanded. Also chalk is not covered in the ASTM classification, but for the purposes of predicting loads it has been assigned values. The range of pull out loads in strong chalks can be considerably higher than shown on the chart and field tests need to be carried out to obtain accurate values.

The Standard Penetration Test (SPT) N values quoted above are in accordance with BS1377:1990 Part9, ASTM Standard D1586-84 and AS 1289.6.3.1-1993