



## Macalloy 650 Geotech Bar

Macalloy 650 introduces a new level of flexibility to the Geotechnical and Civil Engineering sectors. This high yield bar is fully threaded with a cold rolled thread and available in carbon steel and matching stainless steel. The system is manufactured in sizes 25mm to 75mm diameter and threaded along its entire length, only requiring cutting to length and no further threading operation.

Macalloy 650 has many benefits including: -

- Exactly the same tensile properties and thread for the carbon steel and corrosion resistant stainless steel.
- The thread is a cold rolled fatigue friendly form
- Proven bond characteristic well in excess of the type two bond required for BS4449.
- The easy clean, engineered thread pattern gives very low lock off losses, suitable for short length bars.
- Easy to torque the anchor to specific loads, the cold rolled engineering thread allows torque values to be calculated and to give predictable and repeatable torque to load value.
- Adopting traditional and proven installation techniques.
- Available in a range of finishes: Black bar, Stainless Steel and Sherardized+. Providing a range of bars for all environments, from road to marine and mining applications.
- A full range of plates and accessories are provided,



40mm Macalloy 650 with bearing plate


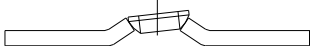
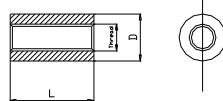
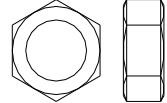


Macalloy operate a quality system which is in accordance with many approval bodies, providing certification from CARES, European ETA, ISO 1090 class 3 and many more.

Macalloy 650 is manufactured generally in accordance with BS 4449.

Simple to use, strong and reliable, the Macalloy 650 system

Diameter	Unit	25	32	40	50	63	75
Cross sectional area	mm <sup>2</sup>	530	847	1320	1963	3187	4185
Weight per m	Kg/m	4.16	6.65	10.36	15.41	25.02	32.85
Max diameter of thread	mm	28.9	36.2	45.3	54.8	65.9	77.2
Yield load	kN	345	551	858	1276	2072	2720
Ultimate tensile load	kN	398	635	990	1472	2390	3139

# Macalloy 650 Anchors

Description		Nominal Bar Diameter					
		25	32	40	50	63	75
Threaded Rebar 	Weight per meter (Kg/m)	4.072	6.196	10.213	15.506	24.238	34.357
	Bar Cross sectional area (mm <sup>2</sup> )	518	789	1301	1975	3087	4376
	Yield of Thread (kN)	337	513	845	1283	2007	2844
	UTS of Thread (kN)	389	591	975	1481	2315	3282
Punch Plate 	L (mm)	150	N/A	N/A	N/A	N/A	N/A
	T (mm)	10	N/A	N/A	N/A	N/A	N/A
Coupler 	Diameter (mm)	42.5	50	62.5	76	93	110
	Length (mm)	85	115	140	170	205	230
Nut  (75mm nut = diameter)	Across flat (mm)	46	56	72	90	105	125
	Length (mm)	34.5	43	53	73.5	98.5	108.5
Washer 	Outside Diameter (mm)	60	70	90	105	128	156
	Thickness (mm)	5	5	5	5	9	10
Flat Plate - Square 	L x L (mm)	150	200	250	300	400	500
	T (mm)	10	25	40	40	40	40



**Macalloy**

Caxton Way  
 Dinnington  
 S25 3QE  
 01909 519 200  
[sales@macalloy.com](mailto:sales@macalloy.com)  
[technical@macalloy.com](mailto:technical@macalloy.com)  
[siteservices@macalloy.com](mailto:siteservices@macalloy.com)