







# **TerraAnchor**



TerraAnchor is an active anchoring system used for permanent as well as temporary stabilisation of existing slopes and structures by using high tensile steel soil anchors (galvanized bar or strands). This is a driven and stressed soil anchoring system used with a suitable facing. Unlike other slope stabilisation methods, this system does not require heavy equipment and cement (grout), thus making it a practical solution, without the need for heavy working platforms and large work space.

## **Applications**

- Strengthening: TerraAnchor can be used for strengthening of existing slopes, embankments, tunnel portals, tunnel caverns, retaining structures and gabion walls.
- Temporary or Permanent Stabilisation of Excavation: TerraAnchor can be used for stabilisation of excavation

during construction of any buried structure (such as bridges, underpasses, building basements) for temporary or permanent stabilisation of the excavated ground slope.

- Slope Stabilisation: TerraAnchor alone or in combination with other slope stabilisation techniques can be used for rehabilitation of failed slopes and landslides.
- Support System: TerraAnchor can be used for providing support to gabions, structural scaffoldings, sheet piles and also against uprooting of trees, electric or telecommunication towers and posts.
- Anchorage: TerraAnchor can be used to improve anchorage for erosion protection mattress, precast armours and grouted mattresses.
- Control of Buoyancy and Uplift Pressure: TerraAnchor of suitable capacity is used for control of buoyancy and uplift pressure in foundation raft, pipelines and submarine protection systems.

### **Technical Parameters**

Properties	Unit	2T Capacity	4T Capacity	10T Capacity	15T Capacity	
Anchor Head			'		'	
Physical Properties <sup>#</sup>						
Material		S.G. Iron casting (Grade 500/7) confirming to IS 1865:1991				
Length	mm	160	263	263	345	
Width	mm	57	90	110	210	
Height	mm	50	76	98	100	
Anchor Bar						
Mechanical Properties <sup>i</sup>						
Grade		EN18 as per BS 970				
Tensile Strength	N/mm <sup>2</sup>	700				
Yeild strength	N/mm <sup>2</sup>	500				
Elongation	%	12				
Anchor Strand						
Physical Properties <sup>®</sup>						
Material		Galvanised Steel Core				
Construction of Strand	Steel core	6 x 36				
Diameter of Wire	mm	8	12	18	20	
Mechanical Properties						
Tensile Strength	kN/m <sup>2</sup>	1770				
Minimum Breaking Force	kN	41	90	204	252	
Working Load	kN	27	60	136	166	
Bearing Base Plate						
Physical Properties <sup>®</sup>						
Dimension	mm	200 x 200				
Thickness	mm	10	10	12	16	
Mechanical Properties <sup>i</sup>						
Grade		EN8 as per BS 970				
Tensile Strength	N/mm <sup>2</sup>	500				
Yeild strength	N/mm <sup>2</sup>	450				
Elongation	%	16				

All the values mentioned are Minimum These values are subject to ±1% variation

#### NOTES

A. Other grades of TerraAnchors are also available as per requirement. B. The above values are subject to change as per discretion of the company.



Figure 1: TerraAnchor System

(Permanent anchor system: Anchor plate

with glvanaized steel bar)



Figure 2: TerraAnchor System (Temporary anchor system: Anchor plate with steel wire reinforcement)

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