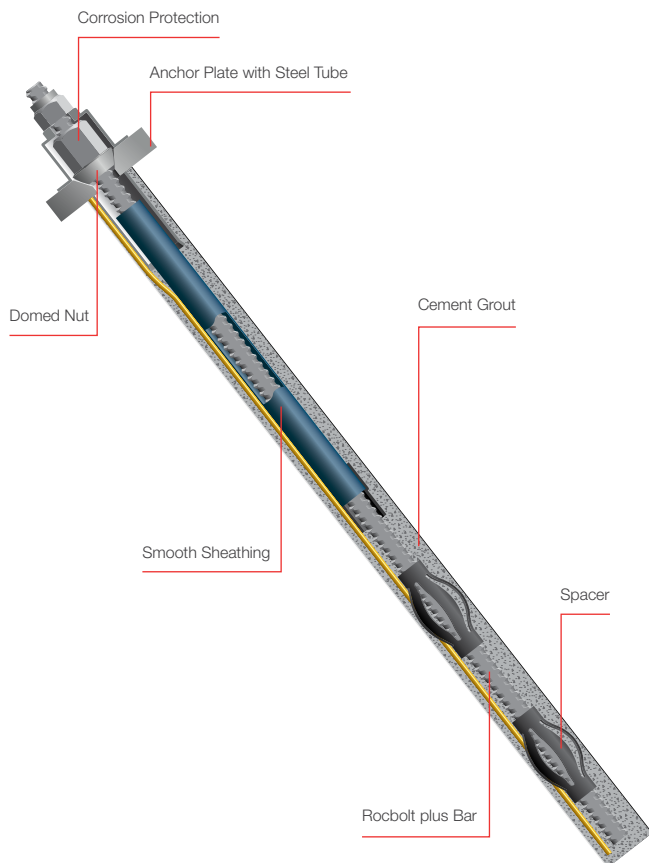


ROCBOLT Ground Anchors

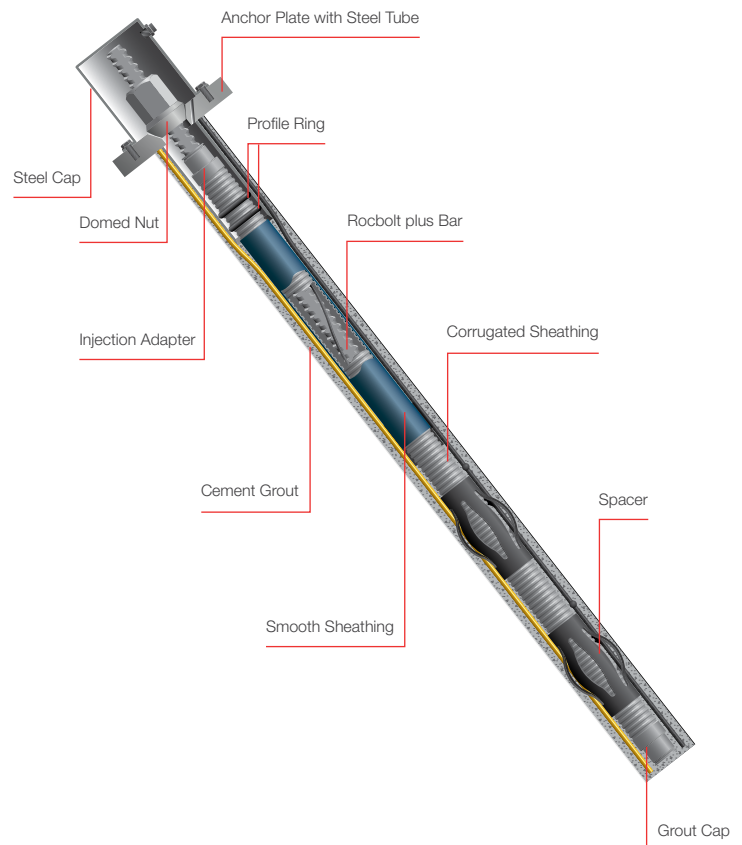
Advantages and Characteristics

- Easy system handling
- Simple restressing and destressing through anchorage with nut
- Permanent corrosion protection possible
- Easy removal of temporary anchors through threaded sleeves
- Flexibility in transport lengths by using couplers
- High bond strength between ROCBOLT Ground Anchor and cement grout
- Angle compensation using wedge washers
- Quality assurance through internal and external supervision of production

Temporary ROCBOLT Ground Anchor



Permanent ROCBOLT Ground Anchor

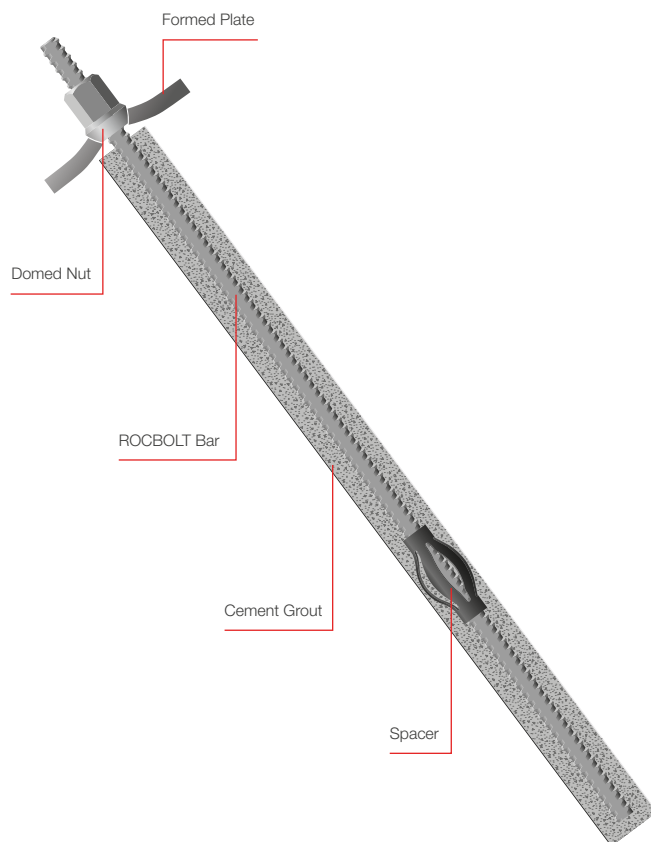


ROCBOLT Soil Nails

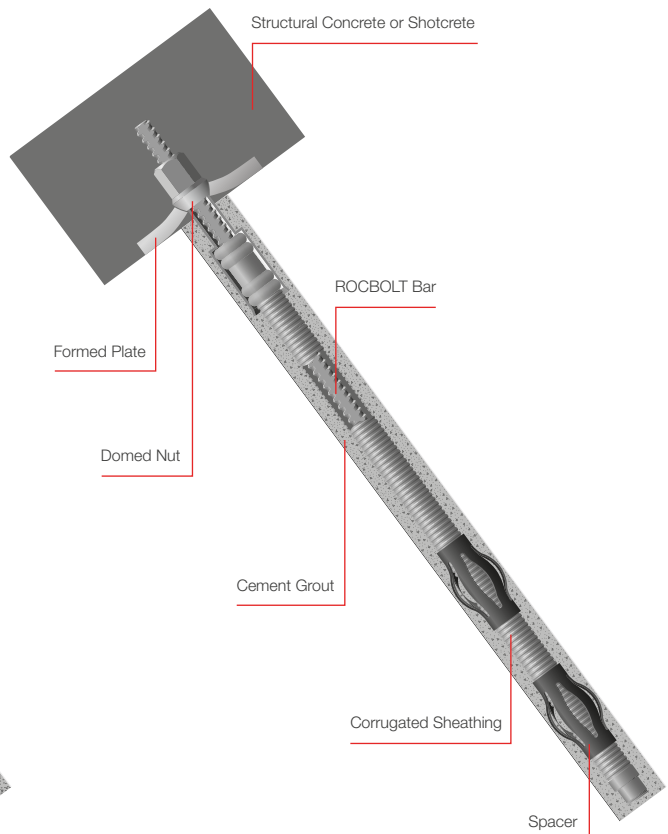
Advantages and Characteristics

- High durability through double corrosion protection possible
- Low susceptibility to corrosion
- Angle compensation up to 20 [°C] through formed plate
- Flexibility in length by using couplers
- Extension bars may be attached by using couplers
- Spacers ensure proper grout cover
- High standard of quality control from production stage to installation of the soil nails ensures consistent quality

ROCBOLT Soil Nail



ROCBOLT Soil Nail – Double Corrosion Protection



ROCBOLT Threadbar Piles

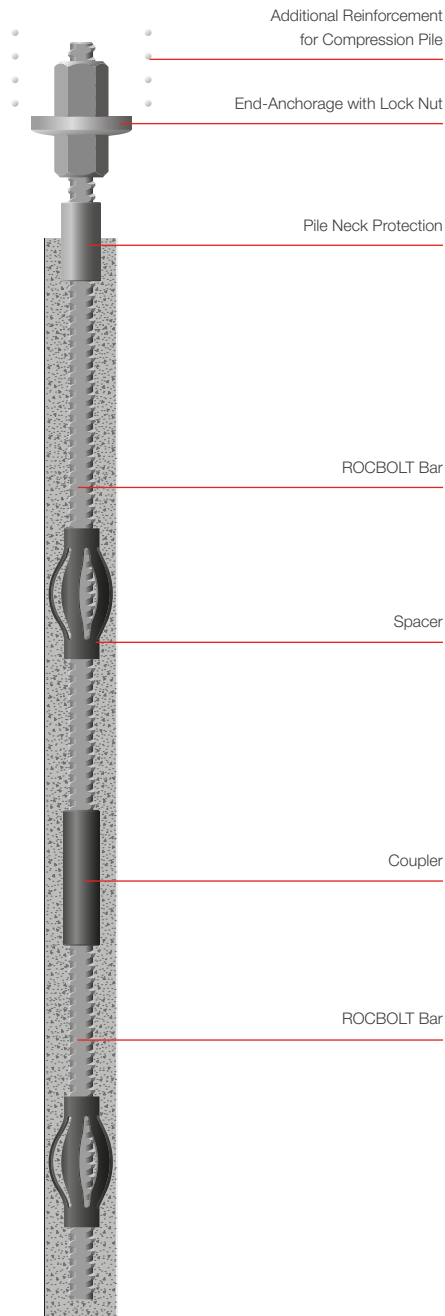
Advantages and Characteristics

The ROCBOLT threadbar pile is a drilled micropile with a central steel element based on the ROCBOLT anchor with hot-rolled, continuous thread deformations on both sides.

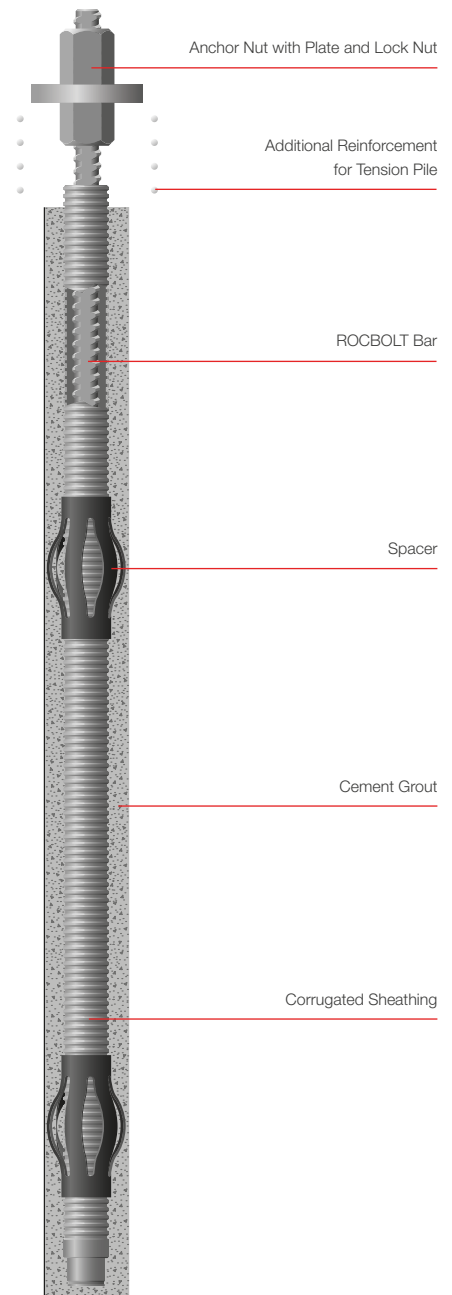
The ROCBOLT anchor is encapsulated in cement grout which acts both as corrosion protection and as load transfer into the soil or rock.

- Excellent load transfer into concrete structures by means of anchoring elements
- Tensile, compressive and alternating loads can be efficiently transferred to the structure
- The coarse ROCBOLT thread guarantees maximum bond between steel and cement grout
- The stress-strain curve of the ROCBOLT bar shows high ductility
- Settlement can be prevented by using preloaded ROCBOLT threadbar piles
- Load transfer into soil is optimised by post-grouting
- Double corrosion protected piles can be used for high corrosion impact as in aggressive media such as seawater or contaminated ground
- Can be cut off or coupled at any given point
- A small drill hole diameter permits economic drilling equipment
- Robust, coarse thread remains threadable even when dirty or damaged

ROCBOLT Threadbar Pile



ROCBOLT Threadbar Pile – Double Corrosion Protection



ROCBOLT Anchor System Applications

- Tie rods
- Marine ties
- Mining roof support
- Heavy lifting
- Reinforcing
- Tunnelling
- Formwork and scaffolding anchors
- High strength reinforcing

500B Threadbar

Technical Data								
Nominal Diameter [mm]	16	20	25	28	32	40	50	64
Min. yield strength [MPa]	500	500	500	500	500	500	500	555
Min. tensile strength [MPa]	550	550	550	550	550	550	550	700
Min. yield load [kN]	101	157	245	308	402	628	982	1,758
Min. ultimate load [kN]	111	173	270	339	442	691	1,080	2,217
Cross sectional area [mm ²]	201	314	491	616	804	1,257	1,963	3,167
Weight [kg/m]	1.58	2.47	3.85	4.83	6.31	9.86	15.41	24.86

670 Threadbar

Technical Data										
Nominal Diameter [mm]	18	22	25	28	30	35	43	57.5	63.5	75
Min. yield strength [MPa]	670	670	670	670	670	670	670	670	670	670
Min. tensile strength [MPa]	800	800	800	800	800	800	800	800	800	800
Min. yield load [kN]	170	250	330	410	475	640	980	1,740	2,120	2,960
Min. ultimate load [kN]	200	300	390	490	565	770	1,170	2,080	2,540	3,535
Cross sectional area [mm ²]	250	375	491	616	707	962	1,466	2,597	3,167	4,418
Weight [kg/m]	1.96	2.94	3.85	4.83	5.55	7.55	11.51	20.38	24.86	34.68

950 Threadbar

Technical Data

Nominal Diameter [mm]	18	26.5	32	36	40	47
Min. yield strength [MPa]	950	950	950	950	950	950
Min. tensile strength [MPa]	1,050	1,050	1,050	1,050	1,050	1,050
Min. yield load [kN]	230	525	760	960	1,190	1,650
Min. ultimate load [kN]	255	580	845	1,070	1,320	1,820
Cross sectional area [mm ²]	241	551	804	1,020	1,257	1,735
Weight [kg/m]	1.96	4.48	6.53	8.27	10.21	14.10

Notes

- Minimum order quantities may apply to this product
- Extended lead times may apply to certain items. Please enquire
- Only ROCBOLT™ Technologies South Africa components should be used to enable the full performance of the bolt system to be obtained