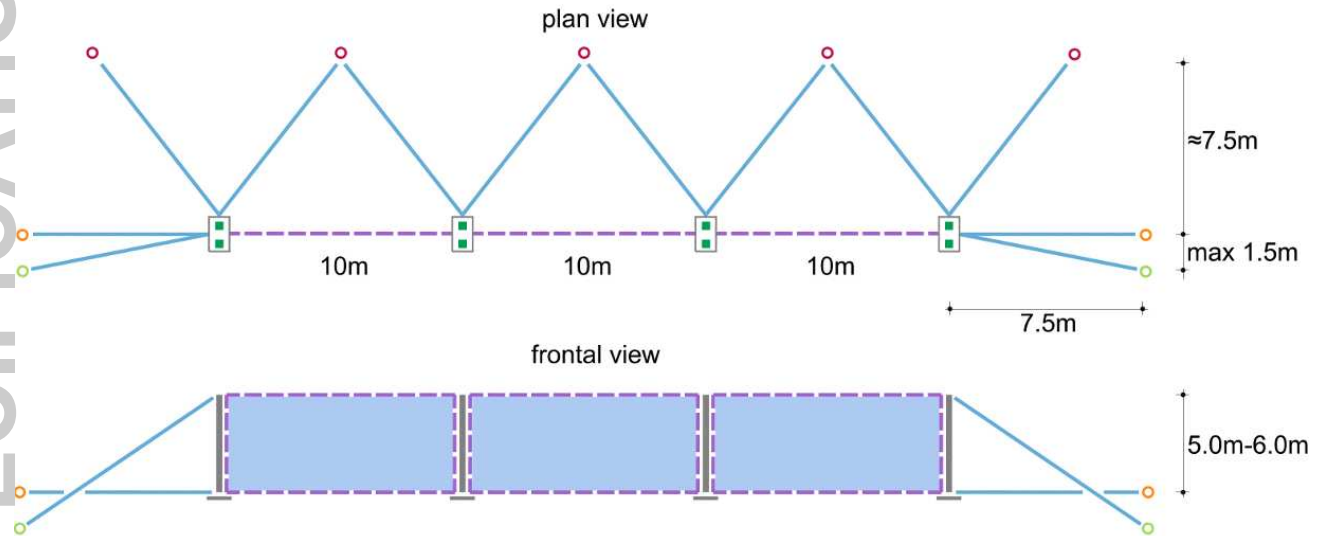


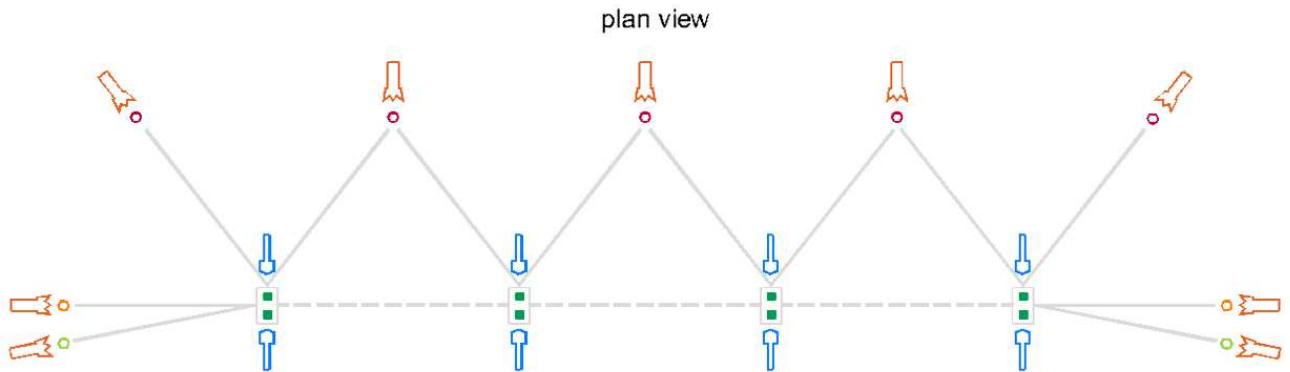
GEOMETRY



Legend

- Upslope anchors Ø.18mm
- Bottom lateral anchors Ø22mm
- Top lateral anchors Ø22mm
- Thread Bolt Ø32mm
- Zinc coated steel base plate S235JR
- Zinc coated steel post HEA200
- Retaining ropes Ø22mm-24mm
- Ring net panel (6 points of connection)

DRILLINGS AND ANCHORS



Technical specifications of foundations

Positions		○ Upslope anchors		○ Upper lateral anchors		○ Bottom lateral anchors		■ Thread Bolt
Typologies		Wire rope Ø.18		Wire rope Ø.22		Wire rope Ø.22		Ø.32mm BS500
Drilling diameter		90mm	120mm	90mm	120mm	90mm	120mm	51mm
Length	Loose soil	5.5m	4.0m	8.5m	6.5m	8.0m	6.0m	3.5m
	Fractured rock	4.5m	3.5m	6.0m	5.0m	5.5m	4.5m	2.0m
	Rock	4.5m	3.5m	6.0m	5.0m	5.5m	4.5m	2.0m

Down The Hole Hammers Ø.90mm-120mm Pneumatic Rock Drills Ø.51mm

3000 kJ Rockfall Protection System - Technical Specifications	
Type	3000 kJ ETAG 027
Energy Class*	6 (3000kJ)
Nominal Heights	5 / 5.5 / 6 m
Post Spacing	10 m
Category* (residual height)	A (>50% nominal height)
Interception structure	
Net Type	Ring Net with 6 connecting points
Weight	6.50 kg/mq
Zinc coating**	EN 10264-2 class A
Ø wire	3.5 mm
Ø wire strand	10.5 mm
Ø single ring	350 mm
Posts	
Type	HEA 200
Material	Steel S235JR
Weight	42.3 kg/m
Zinc coating***	EN ISO 1461
Ground Plates	
Type	Two-bores plate
Dimensions	500x300x12 mm
Material	Steel S235JR
Zinc coating***	EN ISO 1461
Bearing and Retaining Ropes	
Ø rope	from 18 to 24 mm
Type	AM+6x19 wires - 1770 N/mm ²
Safety Standard	EN12385-4
Zinc coating	EN 10264-2 class B
Dissipators	
Type	friction plate / rope Ø 24 mm
Energy Dissipation	from 150 to 450 kJ
Clamps and Shackles	
Clamps type	EN13411-5
Shackles type	High Resistance Bow Shackle
Zinc coating	EN ISO 4042
Wire Rope Anchors	
Ø upslope ropes	18 mm
Ø lateral ropes	22 mm
Rope type	1x19 or 1x37 / 1560 N/mm ²
Rope security standard	EN 12385-10
Zinc coating	EN 10264-2 class A
Ground Plate Anchors	
Type	Thread Bolt Ø 32 mm
Number of micropiles for each plate	2
Material	BSt500 500 N/mm ²
Certified Performance*	
SEL Energy 1 st Test	1005 kJ
Residual Height - SEL 1 st Test	3.56 m
SEL Energy 2 nd Test	1005 kJ
Residual Height - SEL 2 nd Test	3.15 m
MEL Energy	
Residual Height - MEL	2.56 m
Maximum Elongation	9.8 mm
Forces acting on foundations	
Peak load on lower lateral anchors	364.60 kN
Peak load on upper lateral anchors	399.20 kN
Peak load on upslope anchors	247.50 kN
Peak compression load on ground plates	180.40 kN
Peak horizontal load on ground plates	284.20 kN

rev. 1.5 - 22/02/2010

* conforming to ETAG 027

** alternatives are Zn, Zn+Al, Zn+Al+vernice

*** alternatives are Zn, Zn+vernice

Disclaimer of responsibility: Rockfall Defence S.R.L. reserves the right to change without prior notice the specifications and methods of construction mentioned in this document. No responsibility whatsoever can be accepted for any errors or omissions in, or misinterpretation of the contents. Products must be used in conformity with safe practices and applicable codes and regulations. Rockfall Defence S.R.L. shall not be liable in any event for any loss of income, goodwill, increased costs or any special, indirect, incidental or consequential damages arising out of or in connection with the data reported in this documentation.