

Rockfall protection system TS-2000-oA - 2000 kJ Energy

1. General Information

Energy level [kJ]:	2000
Nominal height [m]:	e.g. 4.0
Total length [m]:	e.g. 250
Number of rows:	e.g. 5
Average distance between posts [m]:	e.g. 10

The fitness for use of the offered rockfall protection system must be tested successfully in a 1:1 field test for a minimum energy impact of **2000 kJ**, supervised by an independent authorized technical institute. As part of the certification, no breakage may occur in key structures (e.g. break in wire/rope of primary net, in the bearing or retaining ropes, seam ropes or other vital system ropes; no fracture of posts, etc.) Test report, as well as test summary and the list of monitored anchor forces must be added to the tender.

2. Design of the Main Structure and Individual Components

The design of main structures and of single components must be such as described below (or equal / better). Individual components not cited herein must correspond to the appropriate technical standards (e.g. DIN).

2.1 Interception structure

- Principal net: Type: **Omega-Net**
Corrosion prevention: **galvanisation class A (EN 10244-2)**
Maximum mesh size: **185 mm**
Connection to bearing ropes: **threaded**
- Additional layer: Type: **rectangular netting**
Corrosion prevention: **galvanisation class A (EN 10244-2)**
Maximum mesh size: **60 mm**
Minimum wire diameter: **3.1 mm**

2.2 Support structure

- Post: Corrosion prevention: **hot dip galvanised**
Design: **fixed rotation at the base plate**
- Base plate: Corrosion prevention: **hot dip galvanised**
Connection to underground: **anchored**

2.3 Connection components

- Bearing ropes: Type: **according to EN 12385-4**
Corrosion prevention: **galvanised**
- Retaining ropes: Type: **according to EN 12385-4**
Corrosion prevention: **galvanised**

2.4 Energy absorbing elements

- Operating mode: **Energy dissipation: plastic deformation**
- Position: **close to anchors, for optimal installation**
- Corrosion prevention: **hot dip galvanised**

2.5 Anchoring

- ropes: **Wire Pack Anchor or mono bar anchor**
- posts: **Mono bar anchor**