

Tested Rockfall Protection Systems **Energy level: 250 – 750 kJ**

Text for invitation of tender

Rockfall protection systems TS-250, TS-500, TS-750

Rockfall protection systems with retaining ropes

General information

| | |
|-------------------------------------|----------|
| Energy level [kJ]: | e.g. 250 |
| Nominal height [m]: | e.g. 3.0 |
| 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 (energy level indicated above), 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 rope, seam ropes or other system specific 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.

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).

Interception structure

- **Primary net:** Type: **Omega-Net**
Corrosion protection: **Zinc coated class A acc. EN 10244-2**
Maximum mesh size: **135 mm**
Connection to bearing ropes: **threaded**
- **Additional layer:** Typ: **Rectangular netting**
(*optionally*) Corrosion protection: **Zinc coated class A acc. EN 10244-2**
Maximum mesh size: **50 mm**
Minimum wire diameter: **2.5 mm**

Support structure

- **Post:** Corrosion protection: **hot dip galvanized according to EN ISO 1461**
Design: **Pendulum support (hinge base plate)**

- Base plate: Corrosion protection: hot dip galvanized according to EN ISO 1461
Connection to underground: anchored installation

Connection components

- Bearing ropes: Type: according to EN 12385-4
Corrosion protection: hot dip galvanized
- Retaining ropes: Type: according to EN 12385-4
Corrosion protection: hot dip galvanized

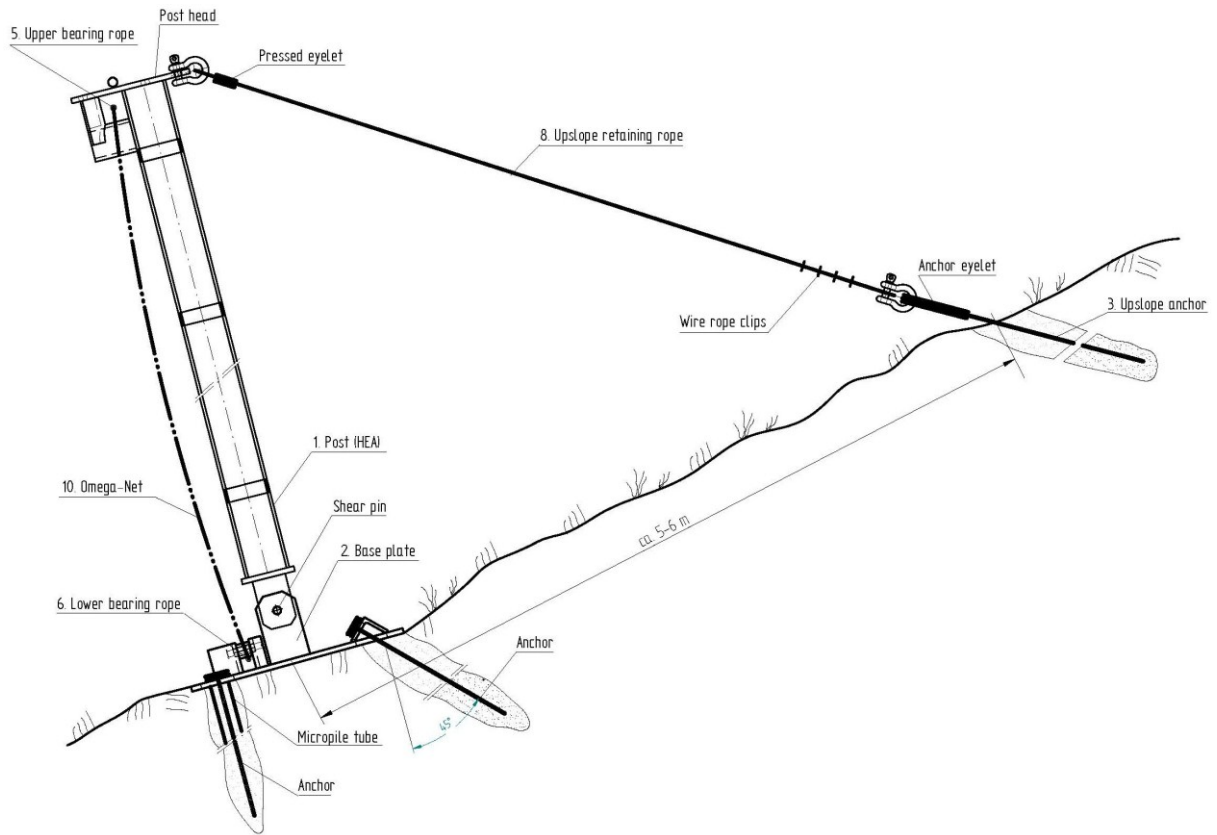
Energy absorbing elements (brake elements)

- Operating mode: Energy dissipation: plastic deformation
- Position: close to anchors, so that can be carried out without dismantling the fence
- Corrosion protection: hot dip galvanized according to EN ISO 1461

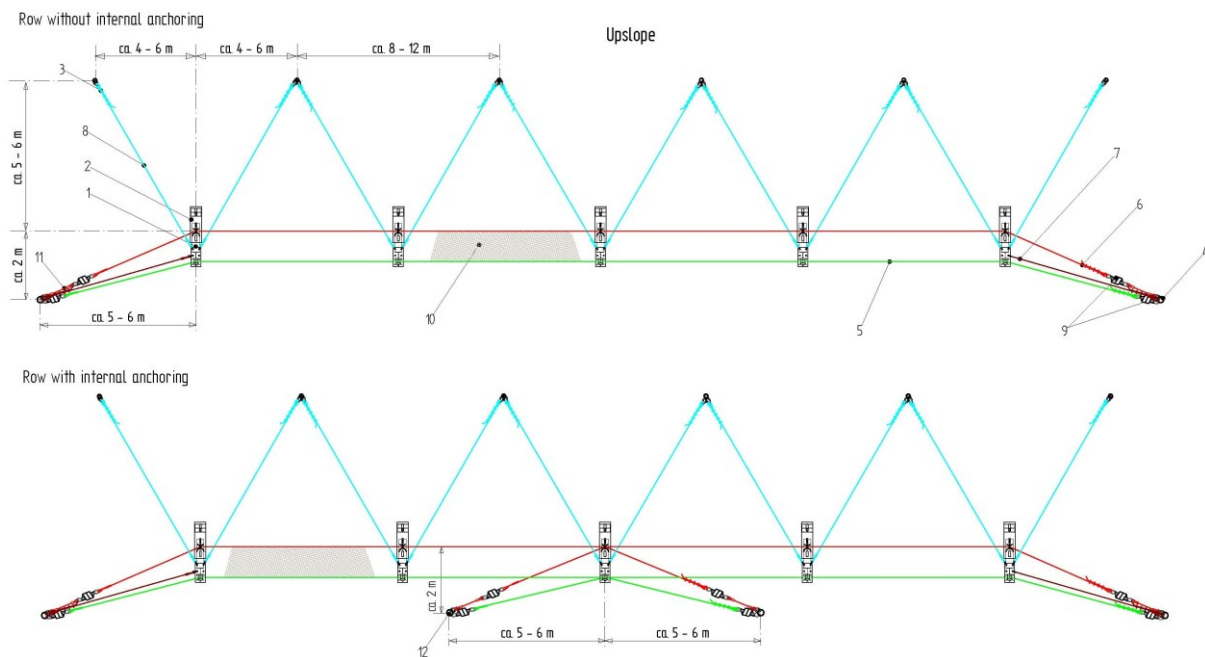
Anchoring

- of ropes: using anchor bars and eyelet frames
- of posts: using anchor bars (2 pieces per base plate)

Lateral view TS-250, TS-500, TS-750



Plan view TS-250, TS-500, TS-750



Note: Rockfall Protection System TS-750 mostly installed with 2 anchors for each side!