

## ***Text for Invitation of Tender Rock retention system using Omega-Net***

The rock retention system using Omega-Net and support ropes consists essentially of Omega-Net, ropes and a combination of mono bar anchor and spike plates with or without rope connection. The anchoring method and the rectangular grid for the anchors (not offset) are dependent on geotechnical conditions on site and have to be defined together with the client at the beginning of the project. The transmission of the appearing forces into the ground has to be provided. During anchoring a detailed report has to be written.

### **General Information**

Area to cover [m<sup>2</sup>]: e.g. 1.000

Ultimate load state and serviceability has to be verified for the chosen anchor grid. The non-positive connection of the bearing ropes with the spike plates prevents the global collapse of the system after a disruption of the rope due to local overloading.

### **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).

#### Net

Type: **Omega-Net**  
Corrosion protection: **Zinc coated class A according to EN 10244-2**  
Maximum mesh size: **200 mm**  
Connection to edge ropes: **threaded**

#### Ropes (optionally)

- Border ropes: Type: **according to EN 12385-4**  
Corrosion protection: **hot dip galvanized**
- Support ropes: Type: **according to EN 12385-4**  
Corrosion protection: **hot dip galvanized**

### Spike plates

- non-positive connection: Type border: Spike plate for 1 rope connection  
Type support: Spike plate for 2 rope connections  
Typ corner: Corner-Spike-Plate  
Corrosion protection: hot dip galvanized according to EN ISO 1461
- without rope connection: Type standard: Omega-Spike-Plate  
Corrosion protection: hot dip galvanized according to EN ISO 1461

### Anchoring

- of rope-ends:: mono bar anchors and Corner-Spike-Plates
- of spike plates: mono bar anchors

### Schematic sketch:

