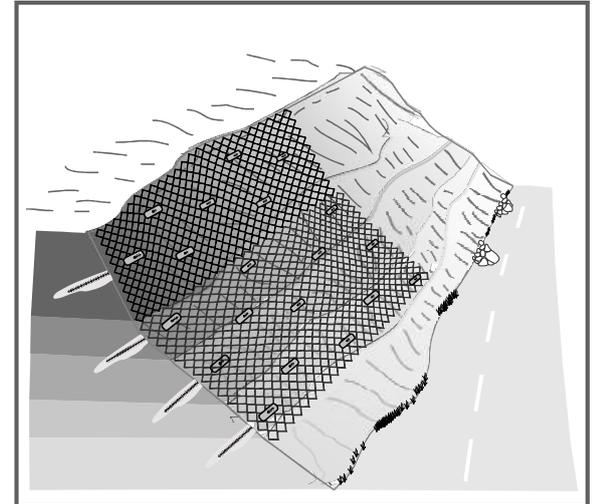


Slope retention system



Sigma Netting



Area of Application:

The TRUMER Sigma Netting is developed for high tensile strength applications. It can be used for stabilizing slopes by pinning them with a combination of mesh and rock or soil anchors, as well as installed as a drape to control erosion. Thus, the frequency and magnitude of events such as rockfall and shallow slumps can be reduced.

Material:

TRUMER rolled rectangular netting products consist of galvanized high grade corrosion prevention using Zinc-Aluminium coating. They are manufactured in accordance with the European Standard EN 10223-6.

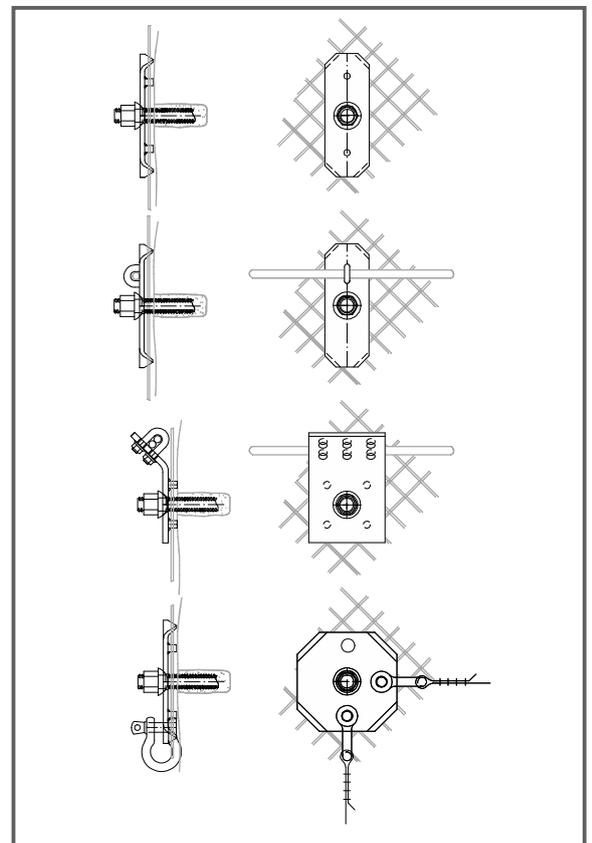
Installation:

The panels are unrolled from the top to the bottom in the hazard zones. The different mesh layers are then connected by overlapping and sewing them together with high-tensile sewing rope in the vertical direction. Horizontal connections are made with an original wire strand yielding a seamless connection. Additionally, mesh can be secured by spike plates at anchor positions.

Advantages:

Under most conditions, the Sigma Netting can be easily and quickly installed, thereby considerably reducing mitigation costs. Furthermore, corrosion protection is assured by a high-quality of metallic coating that increases the life and durability of the netting.

Anchor Connection Plate*



* Anchor plates with two rope connections, i.e. in vertical and horizontal directions are also available

Mesh Characteristics

Mesh Type*	Rectangular netting
Mesh Size [a x a] mm (in.)	50 x 50 (1.97 x 1.97)
Opening angle [α]	90°
Number of mesh openings, length per m (per ft)	13 (~4)
Number of mesh openings, width per m (per ft)	13 (~4)

* in accordance with European Standard EN 10223-6

Wire Properties

Wire Diameter mm (in.)	3.2 (0.13)
Tensile Strength N/mm ² (ksi)	≥ 1770 (257)
Corrosion Protection*	Zinc-Aluminium galvanized
Mass of Coating* g/m ² (oz/ft ²)	≥ 150 (0.49)
Hours of Salt Spray Test**	pending

* in accordance with European Standard EN 10244-2, class B

** in accordance with European Standard EN ISO 9227 (NSS-Test)

Strength Properties

Test Description	Result
Tensile Strength, lengthwise kN/m (lbf/ft)	≥ 150 (10,278)
Tensile Strength, crosswise kN/m (lbf/ft)	≥ 150 (10,278)
Resistance of Puncture, unsupported* kN (lbf)	100 (22,481)
Resistance of Puncture, supported** kN (lbf)	410 (92,172)
Resistance of Puncture, ASTM*** kN (lbf)	150 (33,721)
Shear resistance**** kN (lbf)	205 (46,086)
Shear-punching resistance***** kN (lbf)	45 (10,116)

* tested without a deformable layer beneath mesh (in open air)

** tested with a deformable layer beneath mesh

*** tested with circular plate according to ASTM A975-11

**** shear resistance on upper edge of spike plate (1/2 value of resistance of puncture, supported)

***** slope parallel tensile stress tested with TRUMER spike plate acc. to EAD 230025-00-106

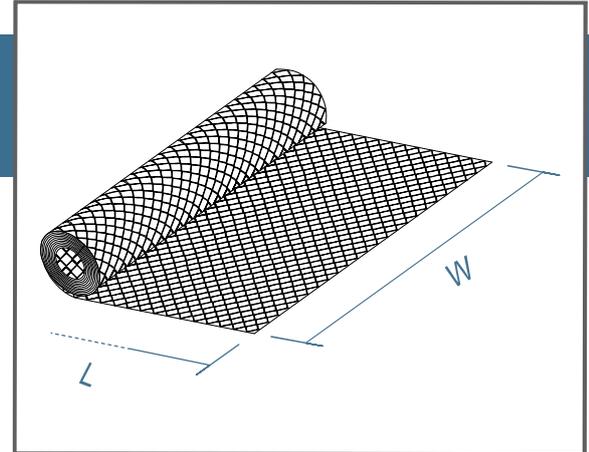
Roll Sizing Options

Width [W] m (ft)	3.00 (9.84)*	3.50 (11.50)*	4.00 (13.12)*
Length [L] m (ft)	10.00 - 25.00 (32.80 - 82.00)*		
Weight kg/m ² (lb/ft ²)	~ 2.75 (0.56)		

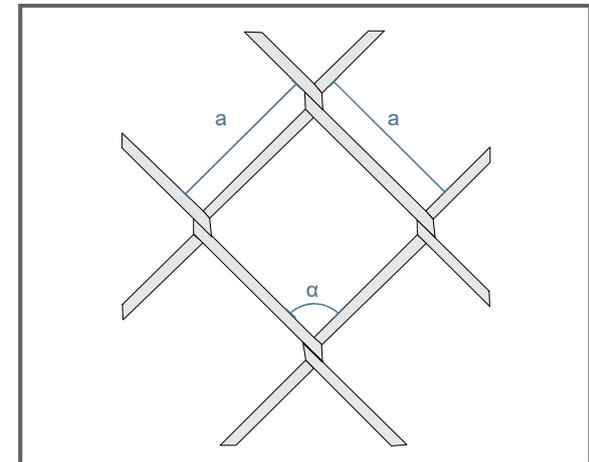
* Other dimensions are possible in accordance with project specific design requirements



Panel Dimensions



Mesh Dimensions



Seam Connection

