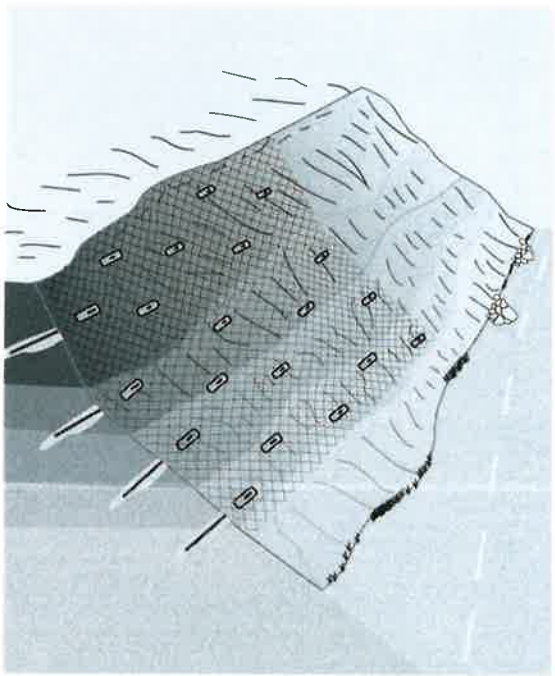
GEOQUEST | TRUMER Schutzbauten



Sigma Netting 50/3.2 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.

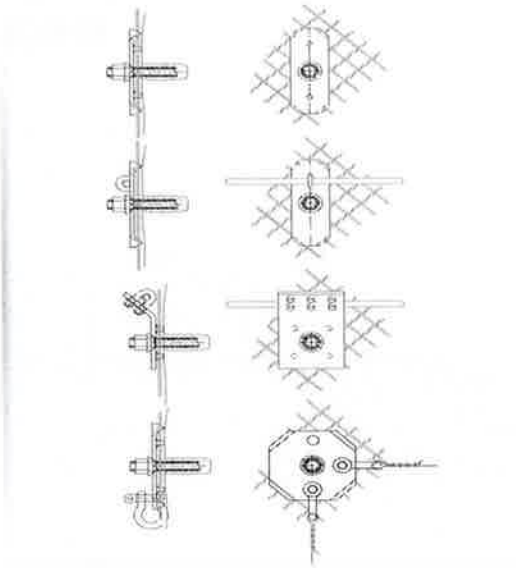
Slope Retention System

SIGMA NETTING 50/3.2

ETA CE

Slope Retention System – Sigma Netting 50/3.2

Anchor plates with two rope connections
(in vertical and horizontal directions)



MATERIAL

Sigma netting product rolls consist of galvanized high grade corrosion prevention using Zinc-Aluminium coating. They are manufactured in accordance with the European Standard EN 10223-6 and certified by ETA (EAD 230025-00-010).

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.

Mesh Characteristics

Mesh Type[i]	Rectangular netting
Mesh Size [a x a] mm (in.)	50 x 50 (2.36 x 2.36)
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)

[i] in accordance with European Standard EN 10223-6

Wire Properties

Wire Diameter mm (in.)	3.2 (0.13)
Tensile Strength N/mm² (ksi)	≥ 1770 (257)
Corrosion Protection[i]	Zn95Al5 galvanized
Mass of Coating[i] g/m² (oz/ft²)	≥ 150 (0.49)
Hours of Salt Spray Test[ii]	1000

[i] in accordance with European Standard EN 10244-2, class B
[ii] 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[i] kN (lbf)	105.2 (23.650)
Resistance of Puncture, supported[ii] kN (lbf)	481.8 (108.313)
Resistance of Puncture, ASTM[iii] kN (lbf)	154.9 (34.823)
Shear resistance[iv] kN (lbf)	240.9 (54.156)
Shear-puncture resistance[v] kN (lbf)	48.8 (10.971)

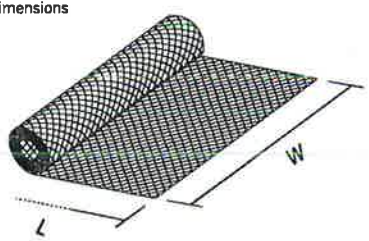
[i] tested without a deformable layer beneath mesh (in open air), in accordance with test report B4/587/18-2 of BVFS
[ii] tested with a deformable layer beneath mesh, in accordance with test report B4/587/18-4 of BVFS
[iii] tested with circular plate according to ASTM A975-11, in accordance with test report B4/587/18-3 of BVFS
[iv] shear resistance on upper edge of TRUMER spike plate (1/2 value of resistance of puncture, supported)
[v] slope parallel tensile stress tested with TRUMER spike plate, in accordance with test report B4/587/18-5 of BVFS

Roll Sizing Options

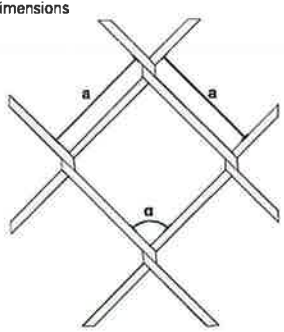
Width [W] m (ft)	2.00 (6.56)[i]	3.00 (9.84)[i]	3.50 (9.84)[ii]	4.00 (13.12)[i]
Length [L] m (ft)	20.00 (65.62)[i]	25.00 (82.00)[i]		20.00 (65.62)[i]
Weight kg/m² (lb/ft²)	2.75 (0.56)			

[i] Other dimensions are possible in accordance with project specific design requirements
[ii] Dimension for transport with 40' container

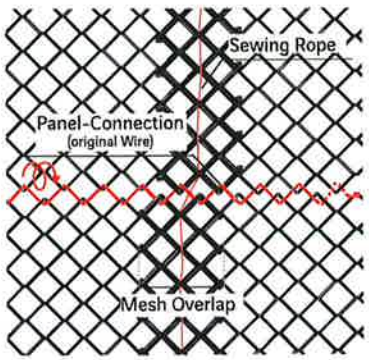
Roll Dimensions



Mesh Dimensions



Seam Connection



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