Slope stabilization

Sigma 50/3.2

Area of application:
TRUMER high tensile rectangular mesh panels were developed for applications with high tensile loads. They can be used as a stabilisation measure to prevent rock masses from breaking away in advance, or as controlled erosion protection. This reduces the frequency and magnitude of events.

Material:
The processed wires of the mesh provide lasting corrosion protection. The product has been tested in accordance with EAD 230025-00-106 and is manufactured in accordance with the European Technical Assessment.

Installation:
The individual mesh panels are unrolled from top to bottom in the potential danger zone. They are overlapped and then connected to each other with system clips or a sewing rope. Twisting a single wire coil in a horizontal direction allows for a smooth transition. The rectangular mesh can be fixed to the ground with different Spike plates and anchors.

Advantages:
Quick and easy installation reduces installation costs under normal conditions. The maximum service life is guaranteed thanks to high-quality corrosion protection and isotropic force absorption.

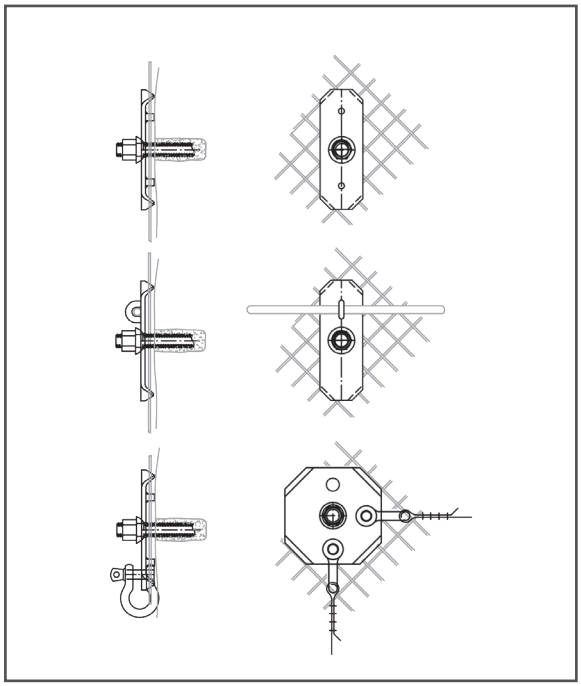
European technical assessment

EAD certification	19/0314 - V2
Technical assessment body	Building Testing and Research Institute (TSUS)

Certificate of performance consistency

Certificate number CoP	1301-CPR-1563
Technical assessment body	Building Testing and Research Institute (TSUS)

Spike plate



Plates with two rope guides/connections, e.g. in vertical and horizontal directions, are also available

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Steel wire mesh

Type Wire mesh [1]	Rectangular mesh
Mesh opening a [mm]	50
Mesh angle α [°]	90
Number of meshes lengthwise [m]	13
Number of meshes crosswise [m]	13

[1] in accordance with European standard EN 10223-6

Wire properties

Wire diameter [mm]	3.2
Wire tensile strength [N/mm²]	≥ 1770
Corrosion protection [1]	ZnAl-galvanized
Coating mass [g/m²]	≥ 150
Coating class	A/B
Salt spray test [h] [2]	>1000/1000

[1] according to the European standard EN 10244-2
[2] according to the European standard EN ISO 9227 (ZnAl-galvanized)

Strength properties

Test Description	Result
Tensile Strength, lengthwise [kN/m] [1]	157.5
Tensile Strength, crosswise [kN/m] [1]	173.3
Minimum tensile strength (ETA), longitudinal [kN/m] [2]	150.0
Resistance of Puncture, unsupported [kN] [3]	101.3
Resistance of Puncture, supported [kN] [4]	414.0
Resistance of Puncture, ASTM [kN] [5]	150.2
Shear resistance [kN] [6]	207.0
Shear-puncture resistance [kN] [7]	45.0

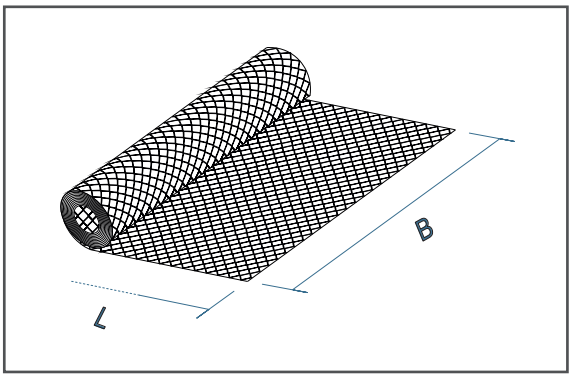
[1] Tested tensile strength in the longitudinal/transverse direction (Average), B4/587/18-1
[2] Tested Tensile Strength in the longitudinal direction (minimum requirement), EAD 230025-00-0111
[3] Tested without deformable layer (free-floating, minimum value), B4/587/18-2
[4] Tested with deformable layer (sand-gravel mixture) below the mesh, EAD 230025-00-0111
[5] tested with ASTM disc plate in accordance with ASTM A975-11 (minimum value), B4/587/18-3
[6] Shear resistance at the upper edge of the TRUMER Spike plates, EAD 230025-00-0111
[7] Slope-parallel tensile stress tested with TRUMER Spike plates, EAD 230025-00-0111

Roll dimensions

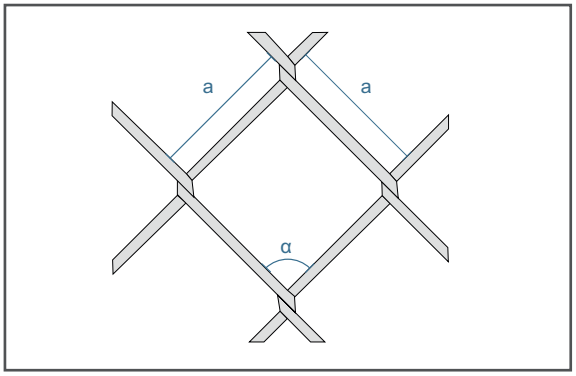
Roll size (L/B) [m] [1]	15,0-25,0	3.0-4.0
Weight [kg/m²]	2.8	

[1] Current stock levels and other roll sizes available on request

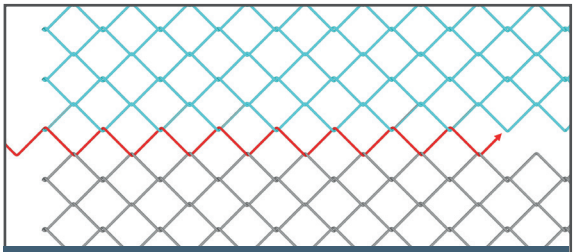
Roll dimensions

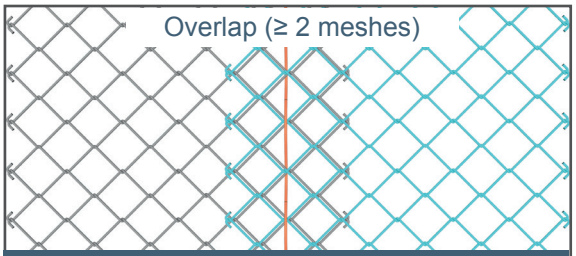


Dimensions of wire mesh

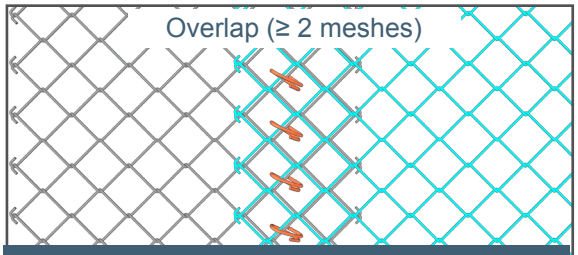


Connection of the mesh panels


Horizontal connection (original wire spiral)



Option 1 - Sewing rope



Option 2 - system clips

Suggestions for connection options according to the current state of the art. Overlap widths, sewing rope diameters and number of system clips must be selected in accordance with local regulations..

We reserve the right to update or change specifications, technical information, and product-related adjustments at any time and without prior notice based on new test results or further testing.
Our General Terms and Conditions (GTC) in their currently valid version apply in addition.