

DELTA[®]: **The quantum-leap in** **rockfall protection mesh**

**uncompromisingly
cost-effective**

- Lower installation costs
- Less material usage
- Longer lifetime

as compared to commercially
available double twisted mesh



European Technical Approval
www.eota.eu



DELTA[®]: Higher performance at lower costs



DELTA[®] decreases your installation costs

- fewer man hours
- fewer machine hours

The low weight of only 68 kg per 105 sqm-roll (hexagonal mesh approx. 147 kg for the same size) enables the handling of the rolls by hand with only a few workers. Even cranes often become redundant.

DELTA[®] reduces your installation time

- Smooth unrolling to the last inch of the roll
- Fast shortening of rolls
- Easy splicing of the rolls

The Geobrugg chain-link-design allows the problem-free unrolling of the mesh to the very last inch and adapts itself perfectly to the slope geometry. On site the roll can easily be shortened by simply turning out a mesh spiral. Where required, the DELTAX[®] clip connects rolls of mesh with optimal force transmission.

DELTA[®] decreases your material-usage

- No mesh overlap at the border ropes
- No unused partial rolls

The special Geobrugg design allows a direct connection of the mesh to the border ropes. No overlap required. The easy extension of rolls by means of connection clips avoids waste material.



DELTA[®] is aesthetically superior

- Almost invisible on the slope

The only 2 mm thin wire fits unobtrusively onto the slope and sets new standards in landscape architecture. Double twisted mesh has a diameter of 5.4 mm (!) or more at the double-twisted part and can be seen also from far away.

DELTA[®] is very durable

- 3 x better corrosion resistance
- 3 x higher break load per mm² wire cross-section compared to commercially available hexagonal-meshes.




GEOBRUGG ULTRACOATING[®] the 3rd generation of our zinc/aluminium coating shows in the salt-spray tests a three times longer lifespan than alu-zinc (galfan) coating.

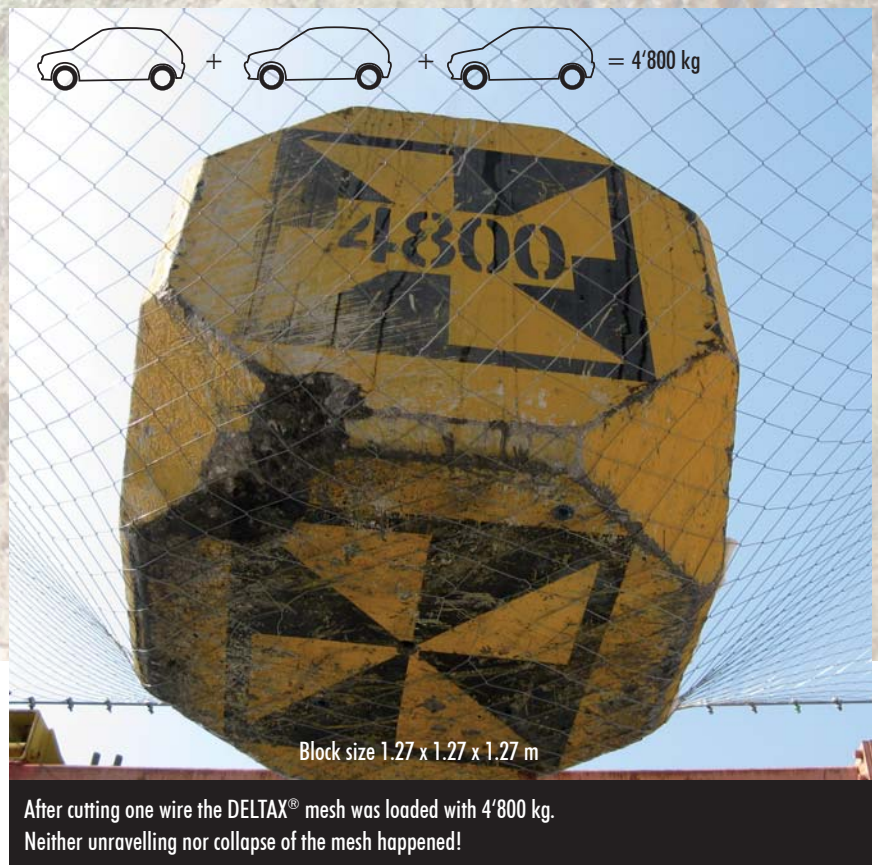
At the same time the 2 mm DELTA[®]-high tensile wire has a higher breaking load than a 2.7 mm wire of a double twisted hexagonal mesh, comparably 1'770 N/mm² versus only 500 N/mm². Thus the unravelling myth can truly be relegated to the realm of pure fantasy. (See photo at right)

DELTA[®] is enviromentally friendly

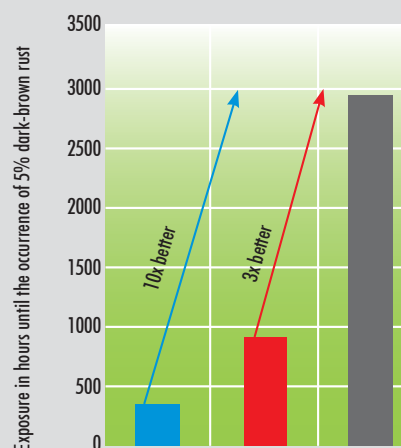
- Optimized CO₂-footprint

The far lower amount of steel needed for DELTA[®] compared to hexagonal mesh leads automatically to a much better CO₂-footprint.

Hot-dip galvanized 
GEOBRUGG SUPERCOATING[®], alu-zinc 
GEOBRUGG ULTRACOATING[®] 

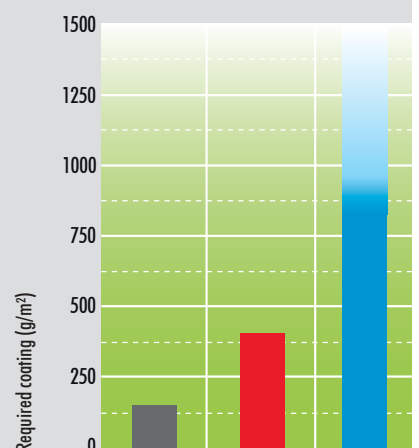


Behavior in the salt spray test according DIN 50021-SS/ASTM B117/EN ISO 9227



Required coating thicknesses

to achieve the same performance for 2'500 hours of salt spray test until the occurrence of 5% dark-brown rust



High-tensile steel mesh: greater performance, more effective



Roll of 105 m² of DELTAX® weighs only 68 kg.

Product liability

Rockfall, slides, mudflows and avalanches are natural events and therefore cannot be calculated. This is why it is impossible to determine or guarantee absolute safety for persons and property with scientific methods. This means that to provide the protection we strive for, it is imperative to maintain and service protective systems regularly and appropriately. Moreover, the degree of protection can be diminished by events that exceed the absorption capacity of the system as calculated to good engineering practice, failure to use original parts or corrosion (i.e., from environmental pollution or other outside influences).

DELTAX® rockfall protection mesh (acc. with EN 10223-6): The most important specifications

DELTAX® high-tensile steel wire		
Approval no. ETA:	ETA-12/0285	
Wire diameter:	2.0 mm	(in acc. with EN 10218)
Tensile strength:	≥ 1770 N/mm ²	(in acc. with EN 10264-2 / EN 10016-1 and 2)
Material	high-tensile steel wire	
Mesh shape	rhomboid	
Mesh width	82 mm	
Angle of mesh	53 degrees	
Total height of mesh	8 mm	
No. of meshes longitudinal	5.7 pcs/m	
No. of meshes transversal	9.9 pcs/m	
Corrosion protection	GEOBRUGG ULTRACOATING® (in acc. with EN ISO 9227)	
Tensile strength of mesh longitudinal	53 kN/m	(in acc. with LGA test report 12/2009)
DELTAX® - mesh standard roll		
Mesh edges	mesh ends knotted	
Roll width	3.5 m	
Roll length	30 m	(on request up to 100 m)
Total surface per roll	105 m ²	
Weight per m ²	0.65 kg/m ²	
Weight per mesh roll	68 kg	

(Small deviations from the mesh geometry and other modifications are subject to change)



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