

STEELGRID® HR

HIGH STRENGTH MESH FOR SLOPE & ROCKFALL PROTECTION

SteelGrid® HR is a high stiffness composite mesh offering high tensile strength at low elongation and high punch resistance at low deflection.

SteelGrid® HR is an engineered combination of Double Twist wire mesh and high tensile wire ropes in an easy to install product. Steel cables are woven into the mesh during manufacture which enables better stress distribution in the upper longitudinal cables and reduced strain in the drapery system.



SteelGrid® HR drapery kit

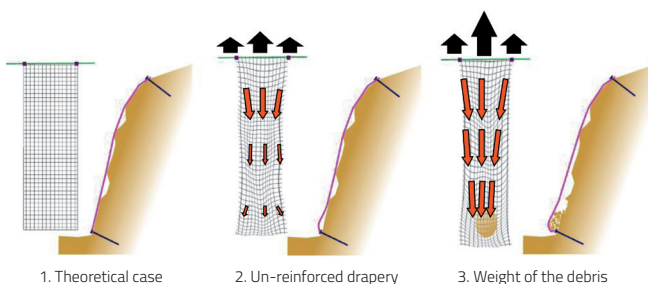
SteelGrid® HR uses:

- M** High strength, high durability reinforced mesh for Draped Netting Systems (CIRIA C775)
- M** A high stiffness composite mesh for use in Stabilization Netting System installations (CIRIA C775)



SteelGrid® HR benefits:

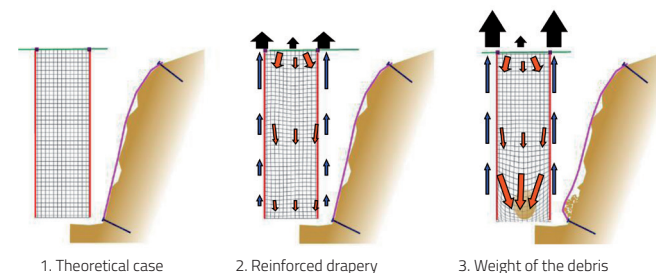
- M** 2 products in 1 - High durability mesh and high tensile steel wire ropes - reduces installation time and cost
- M** No overlap required between rolls - efficient slope coverage and low wastage
- M** High stiffness/low strain - excellent debris containment
- M** Adaptable mesh can be conformed to slopes and is easy to install
- M** Range of strengths - punch resistance up to 155kN, tensile resistance up to 180kN/m



1. Theoretical case

2. Un-reinforced drapery

3. Weight of the debris



1. Theoretical case

2. Reinforced drapery

3. Weight of the debris

The evidence – Force redistribution

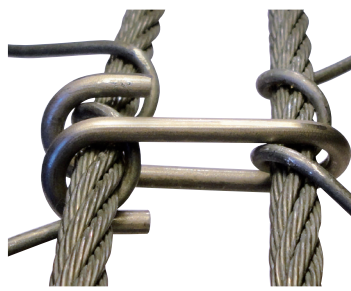
Integral high-tensile steel ropes enables Steelgrid® HR to more efficiently redistribute forces in the mesh (caused by debris accumulation and / or ice loads) back to the top ropes and anchors with less mesh deformation. Un-reinforced drapery mesh can exhibit heterogenous deformation.

STEELGRID® HR

The **Steelgrid HR mesh kit** is a complete system containing the components needed to install the mesh onto the anchors on a project site including; HR or HR-P mesh, HR Plate (where required), HR-Grips and HR-Links. The HR Plate features spiked corners to engage with the mesh and ropes.



HR Grip



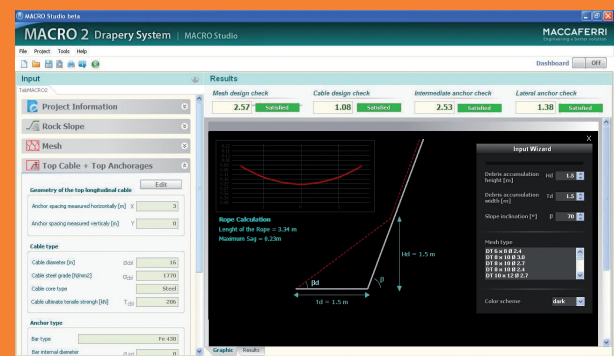
HR Mesh links

Corrosion protection:

- M** Normal exposure: Steelgrid HR: Mesh wires and ropes galvanised with Zn/Al Alloy Class A - (BSEN 10223)
- M** More aggressive conditions: Steelgrid HR-P: As Steelgrid HR but with an additional continuous polymer coating on the mesh and ropes
- M** BBA mesh available

Design Tools

- M** **Macro Studio** - for designing either Draped Netting Systems or Stabilisation Netting Systems
- M** **'MAC-S Design'** for the design and analysis of soil nail slopes and mesh facings



Polymer coated cable

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