

# // SLOPE STABILISATION



**AVALONS KEY STAFF EACH HAVE OVER 20 YEARS EXPERIENCE IN DIFFICULT AND HIGH ACCESS GEOTECHNICAL SLOPE STABILISATION WORK.**

New Zealand's active geology and extreme weather conditions leaves us particularly exposed to rockfall and slips. Stabilisation systems are a key element in the design of modern infrastructure networks and have a direct impact on safety. AVALON has a history of working with MACCAFERRI, the worlds original and leading manufacturer of proprietary rockfall protection systems and can meet your highest specifications regarding durability, strength and overall performance.



ABOVE. Rockfall netting, Napier.

## // ACTIVE REINFORCEMENT

Active systems apply a pre-load at the potential rockfall or slip source to prevent detachment. Active mesh systems require closely spaced anchorages if they are to be truly effective. Where the rock or soil is non-compressible the pre-load can only be effective in projecting areas.

Tensioned Rock Bolts	Wire Rope Panels
Wire Rope Strapping	Reinforced Mesh
Tensioned Soil Anchorages	

## // DRAPED MESHING

Draped mesh or rockfall netting is the commonest means of mitigating rockfall hazards. Widely used internationally, installation is rapid and cost effective. AVALON installs a wide range of mesh types, from galvanised single twist through double twist zinc/aluminium/plastic coated to high energy absorbing wire rope panel systems.

## // EROSION CONTROL

Protecting soils and weaker rocks from our harsh climate:

Geogrids and Meshes	Biotextiles
Vegetation Seeding	Shotcrete
Geotextiles	Drainage

## // PASSIVE SUPPORT

Passive support becomes active during minor movement and prevents full detachment. Component strengths are optimised and anchor/mesh patterns balanced using design software. Some examples of passive support include:

Soil Nails	Conformed Mesh Systems
Rock Dowels	In-situ Concrete Support
Reinforced Shotcrete	

## // MACCAFERRI PRODUCTS

### MACCAFERRI

DOUBLE TWIST MESH; ZnAl/pvc coated wire mesh
STEELGRID; double twist mesh with steel wire ropes
HEA PANELS; wire rope panels with high energy 'knots'
TENSAR; polymer geogrids for reinforcement
ENKAMAT; vegetal root reinforcement mat
BIOMAC; coir blanket for vegetation

### Why choose *Double Twist*?

Double twist mesh can offer the following advantages:

- // Load transfer is equal.
- // Single Strand failure does not compromise the panel.
- // Deformation absorbs energy, allowing for lighter anchorages.
- // Long service life; PVC coating in addition to ZnAl.
- // Proven to be effective on thousands of sites worldwide.
- // More cost effective than the alternatives.



ABOVE LEFT. HEA reinforced double twist.  
ABOVE CENTRE. Shotcrete preparation; dowels, weldmesh.  
ABOVE RIGHT. Single twist can 'un-zip' if one strand breaks.