

MAC.RO. SYSTEM - HEA PANEL

HIGH ENERGY ABSORPTION ROCKFALL PROTECTION PANEL

HEA Panel

The new HEA Panel (High Energy Absorption) combines high strength features of the wire rope with the steel knot.

The new knot is made by two bindings, each one obtained by looping a pair of steel 3,00 mm wires coated with a 95% Zinc-Aluminium, 5% Mischmetal alloy. The two bindings tightly envelope the ropes crossing each other.

The panel is made of square meshes manufactured with one rope, closed by an aluminium pressed spinning cot, with resistance not less than 90% of the rope breaking load.



Figure 1 - HEA Panel application



Figure 2 - Lacing node detail

Table 1 - Standard panel dimensions

Mesh (mm)	400 x 400 300 x 300
Panel height - H - (m)	3,0
Panel length - L - (m)	6,0

Other sizes available on order.

Table 2 - Knot - Binding rods

Envelope of two pairs of wires	
Steel coated with Galfan	EN 10244, Class A
Diameter (mm)	Ø = 3 (UNI EN 10218)
Breaking load of the wire used for the bars (N / mm ²)	380 - 500
Tear resistance	
Maximum load of tear break (kN)	24,4
Minimum breaking load of the rope (kN)	11,9

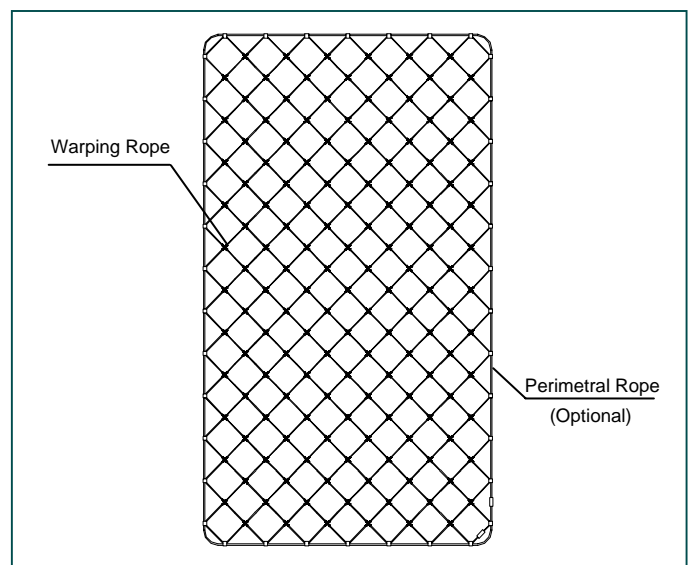


Figure 3 - Example of HEA Panel structure

Table 3 - Steel ropes

Warping rope	
Diameter (mm)	Ø = 10,0
Drawn rope type 6x19 IWS	UNI EN 10264-2 UNI ISO 2408
Nominal wire breaking load (N / mm ²)	1770
Minimum breaking load of the rope (kN)	63
Perimetral rope (optional)	
Diameter (mm)	Ø = 10,0
Rope type 6x19 IWS	UNI EN 10264-2 UNI ISO 2408
Nominal wire breaking load (N / mm ²)	1770
Minimum breaking load of the rope (kN)	63

Table 4 - Aluminium spinning cot

Joint spinning cot for the perimetral edge ropes
Cylindric shape (DIN 3093), Al 5150 A,
Junction resistance equal to 90% of the rope breaking load
C open shape, Al 6060 T5
Spinning cot to connect the two ropes (warp and perimetral)