

## ENSURING SAFETY THROUGH TESTING AND CERTIFICATION

Our rockfall solutions undergo a complex, rigorous test and certification campaign.

The assessment of their performance takes place through specific tests, both in normal conditions and extreme conditions, such as long exposure to salt spray and SO<sub>2</sub> sulfur dioxide.

In addition to international standard testing requirements for mechanical performance of the overall system, all the raw materials and components of Maccaferri Rockfall Barriers undergo dedicated aging tests, in order to ensure their reliability from the moment of installation to the end of their working life.



## SALT SPRAY TEST

ROCKFALL BARRIERS  
HEA PANELS  
NETTING SYSTEMS

up to  
**3,000 h**  
exposure  
without rust  
formation



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# Engineering a Better Solution

Maccaferri's motto is 'Engineering a Better Solution'. We don't merely supply products, but work in partnership with our clients, offering technical expertise to deliver versatile, cost effective and environmentally sound solutions. We aim to build mutually beneficial relationships through the quality of our service and solutions.

## GLOBAL ENGINEERS

In the second half of the 19<sup>th</sup> century, we invented Gabions and dramatically changed the civil engineering landscape. We are still changing it today. We work every day to find better solutions for our clients at every degree of latitude and longitude. Our worldwide network grows through innovation and diversification of sectors of activity and through an increasing range of high quality and environmentally friendly products and applications.

## OFFICINE MACCAFERRI GROUP PROFILE

Founded in 1879, our Group soon became a worldwide reference in the design and development of advanced solutions, with offices in over 70 countries and 30 factories worldwide.

Our mission is to pursue excellence through continuous improvement, while delivering to customers engineered solutions that are innovative, advanced and environmentally friendly. We are committed to outstanding safety, quality and sustainability, to create value for all stakeholders as well as our communities.

## MACCAFERRI APPLICATIONS



RETAINING WALLS  
& SOIL REINFORCEMENT



HYDRAULIC WORKS



ROCKFALL PROTECTION  
& SNOW BARRIERS



EROSION CONTROL



SOIL STABILIZATION  
& PAVEMENTS



BASAL REINFORCEMENT



COASTAL PROTECTION,  
MARINE STRUCTURES  
& PIPELINE PROTECTION



ENVIRONMENT,  
DEWATERING & LANDFILLS



DRAINAGE OF STRUCTURES



TUNNELLING\*



LANDSCAPE  
& ARCHITECTURE



SAFETY & NOISE BARRIERS



FENCING & WIRE



AQUACULTURE  
NETS/CAGES



CONCRETE FLOORING,  
PRECAST & OTHER USES\*



INDUSTRIAL  
MANUFACTURING

**MACCAFERRI**

A close-up photograph of several thick, braided steel cables running diagonally across a dark, textured rock surface. The cables are secured with metal clamps or splices. The lighting is bright, casting shadows on the rock. The background is a blurred view of a mountainous landscape.

**HIGH-DURABILITY  
ROCKFALL COATINGS**

## ADVANCED METALLIC COATING TO FIGHT CORROSIVITY

When exposed to aggressive environmental conditions, a rockfall protection can quickly deteriorate, threatening the security of people and assets.

The exposure to wetness and pollution of the atmospheric environment, together with the effects of chlorides and salts, considerably affect the rate of corrosion by altering the quality of the steel wire.



**WOULD YOU  
FEEL SAFE?**

Corrosion of the steel wire can lead to the deterioration of rockfall protections.

The application of an advanced coating enhances the performance of our rockfall protection systems preventing wire degradation.

**A 5x longer durability** means less maintenance and a lower total cost of ownership.

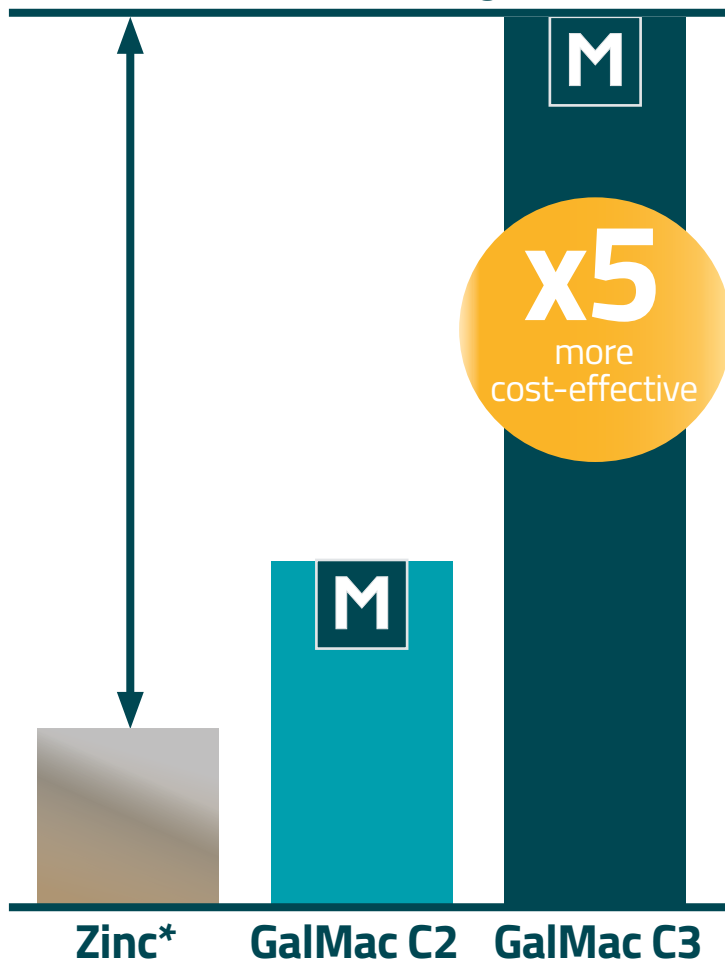
**Zinc class B is not compliant with ISO 17745:2016.**

**DO NOT PLAY WITH SAFETY,  
FOLLOW THE STANDARDS!**

Maccaferri **GalMac C2** and **GalMac C3** coatings guarantee a design working life of at least **50 years** in C2 and C3 environment classes respectively.

In accordance with the standards:  
ISO 17745:2016, ISO 17746:2016,  
EN 102233:2013

### WORKING LIFE for class A coatings



### COATING Class A only

### WORKING LIFE

|                                  |     |
|----------------------------------|-----|
| Zinc                             | 25  |
| GalMac C2<br>(Zn95%/Al5% Alloy)  | 50  |
| GalMac C3<br>(Zn90%/Al10% Alloy) | 120 |

|                                  |    |
|----------------------------------|----|
| Zinc                             | 10 |
| GalMac C2<br>(Zn95%/Al5% Alloy)  | 25 |
| GalMac C3<br>(Zn90%/Al10% Alloy) | 50 |

|                                  |    |
|----------------------------------|----|
| Zinc                             |    |
| GalMac C2<br>(Zn95%/Al5% Alloy)  | 10 |
| GalMac C3<br>(Zn90%/Al10% Alloy) | 25 |

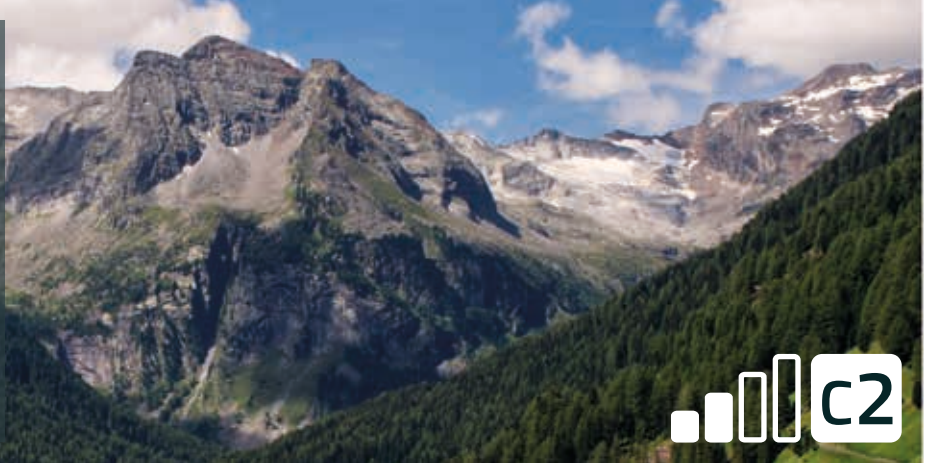
\* ISO 17745:2016 does not include zinc class B.

## ENVIRONMENT

### LOW AGGRESSIVE

Dry conditions

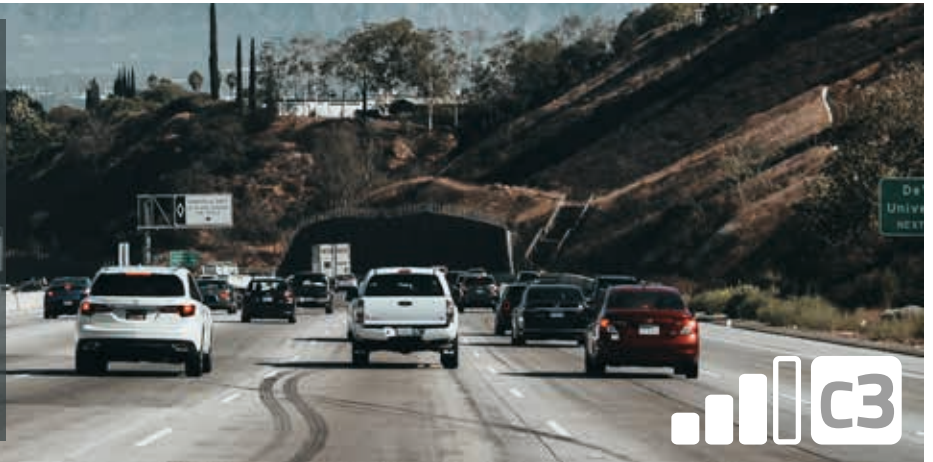
Temperate zone, atmospheric environment with low pollution. Dry or cold zone, atmospheric environment with short time of wetness.



### MEDIUM AGGRESSIVE

Dry conditions

Temperate zone, atmospheric environment with medium pollution or some effect of chlorides.



### HIGH AGGRESSIVE

Wet conditions

Temperate zone, atmospheric environment with high pollution or substantial effect of chlorides.

