



A.G.A. Group  
Merton Hall Ponds  
Merton, Thetford  
Norfolk IP25 6QH  
Telephone: +44 (0) 1953 886824  
Email: [info@agagroup.org.uk](mailto:info@agagroup.org.uk)  
[www.agagroup.co.uk](http://www.agagroup.co.uk)

## Product Specification Sheet

### A.G.A. Gabions - Durability

The durability of gabions is dependent upon environmental conditions that they are subjected too.

The following statements are based on the anticipated life expectancy of the mesh providing the units are:-

- Not subjected to mechanical or chemical damage occurring to the coatings.
- The installation is carried out in accordance with our recommendations and the quality of the stone/rock fill is a hard durable material to the correct grading.
- A programmed inspection is carried out at regular intervals.

#### \*Triple Life coated gabions - 95%zinc 5%Alu

- In a dry land situation and where the PH of the soil is in the stable zone for zinc, and no trace chemical elements in the soil are detrimental to zinc 70 years plus.
- In river applications the durability depends on water quality and bed load, where the gabions are not subjected to heavy bed load, impact by debris and the water quality is good then a life expectancy of 30 years plus can be considered providing at future dates conditions remain the same.
- Coastal defence works are not recommended.

#### PVC- Zinc coated

- In a dry land situation a life expectancy of up to 120 years may be considered providing no mechanical or chemical damage occurs to the PVC coating.
- In river applications the durability depends on bed load and construction, where the gabions are not subjected to heavy bed load, impact by debris and the water quality is good then a life expectancy of 40 years plus can be considered providing at future dates the conditions remain the same. If a heavy bed load occurs further advice should be sought.
- Coastal defence works only considered for sheltered locations where subjected to wave heights of greater than 1m very occasionally and that the beach is not a shingle/gravel beach up to 30 years providing the units are well packed.

#### \*Triple Life Corrosion Protection

- TRIPLE LIFE corrosion protection is a 95% Zinc 5% Aluminium coating applied to the wire prior to fabrication of the welded mesh.
- Triple Life is a trade mark name for the process developed by The Galfan Institute. It has the same corrosion protection as Bezinal or Galmac.
- Zinc Aluminium coatings are superior to pure zinc coatings (galvanising) in that the rate of corrosion is parabolic rather than linear. The reason for the parabolic rate of corrosion is that the zinc corrodes at a faster rate than aluminium, hence during the corrosion process as the zinc element corrodes, an aluminium rich surface is developed, which has greater resistance to corrosion, thereby extending the life of the protection.
- A further advantage of the coating is that it has a finer microstructure and provides better cathodic protection. Accordingly, should the surface become scratched the corrosion protection is maintained (i.e. it is self-healing).
- Based on long term site trials, it has been established that the durability of the zincaluminium coating is three to four times the life expectancy of a pure zinc coating for the same coating weight.
- In gabion manufacture zinc-aluminium coating has replaced the pure zinc coatings.
- It has also replaced PVC-Zinc coatings, except in extreme exposure conditions where gabions are subjected to saline or salt spray conditions.

The A.G.A. Group provided this information for reference purposes only. This specification is not intended as a warranty or guarantee. The company assumes no liability in connection with the use of this information.

Please contact us for current specifications and changes arising from new developments.

