

EROmasta FastRock

For Coastal and Marine Scour Protection/ Erosion Control



Introducing FastRock! Flexible Rope Net Gabions (FRN)

Flexible Rope Net Gabion

Flexible Rope Net Gabion are made from polyester yarn, HDPE or other suitable polymers. The product consists of netting and polymer ropes which are fabricated together in controlled environment. It comes with a lifting ring which aids in connecting the bag safely with lifting equipment.

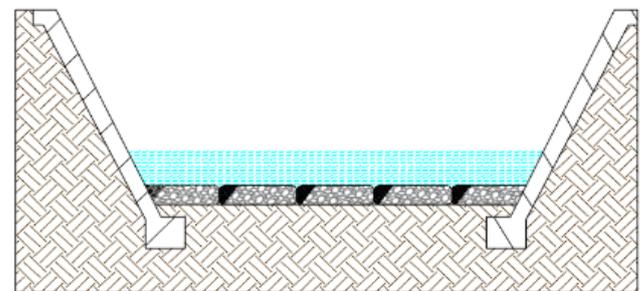
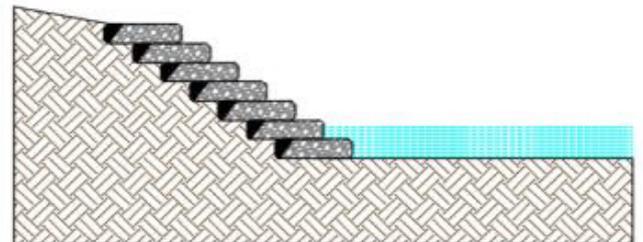
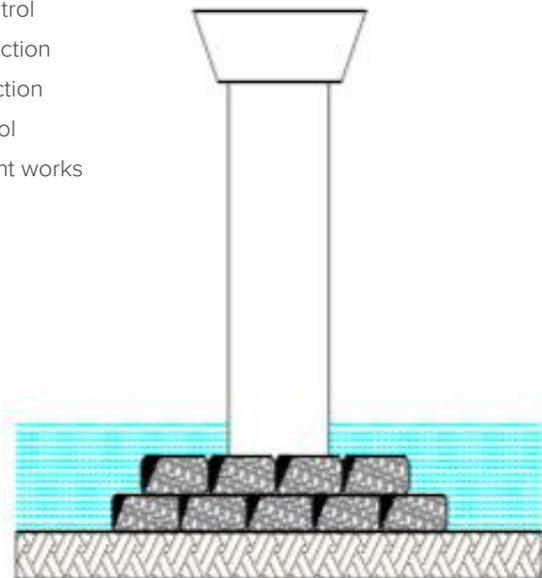
Polymers are inert to corrosive coastal environment; these gabions are highly preferred for under water and coastal protection works. Boulder fill can be done in-situ or gabions can be prefilled and installed in place with the help of suitable equipment. These gabions after filling are placed adjacent to each other to form a continuous structure. Based on the test reports from BTTG-Shirley Tech UK, we can offer products with 25 years or 50 years design life when covered and maintained as stipulated on EN/ISO/BS codes.



Application & Features

Product Applications

- ✓ River training
- ✓ Erosion control
- ✓ Scour Protection
- ✓ Bank protection
- ✓ Flood control
- ✓ Embankment works



Introducing FastRock! Flexible Rope Net Gabions (FRN)

Single point lifting make handling the bag easy after filling for placing in desired location or site.

- Installation along river banks and streams to control erosion and also help the sustainable vegetation to grow and integrate into the environment.
- Forged and extremely strong lifting ring with safe working load test certificates.

TYPICAL DIMENSIONS



"Sr. No."	Product Type	Diameter (m)	Height(m)	Recommended Stone Fill Size
1	1T	1.50	0.50	>50mm
2	2T	1.97	0.65	>50mm
3	4T	2.20	0.85	>50mm
4	8T	3.85	1	>100mm

*Custom made products available on request

TYPICAL MATERIAL SPECIFICATIONS

Essential Characteristics	Performance	Test Standard	Harmonized Technical Specification
Tensile strength MD Tensile strength CMD	MD- 25 kN/m minimum CMD- 8.5 kN/m minimum	EN ISO 10319	EN 13249:2016 EN 13250:2016 EN13251:2016 EN 13253:2016 EN 13254:2016 EN13255:2016 EN 13256:2016 EN 13257:2016
Elongation at Maximum load MD Elongation at Maximum load CMD	MD- 15 % minimum CMD- 75 % minimum	EN ISO 10319	
Mass/ unit area	195 gms/sq. Meter	ISO 9864	
Thickness @ 2 kPa	2 mm	ISO 9863-1	
Static Puncture strength (CBR)	1500 N	ISO 12236	
Resistance to hydrolysis test	% Strength Retention > 85	NF EN 12447	
Microbiological resistance test	% Strength Retention > 80	ENV ISO 12225	
Resistance to chemical degradation mention A	% Strength Retention > 90	ISO TR 12960	
Resistance to chemical degradation mention B	% Strength Retention > 90	ISO TR 12960	
Resistance to weathering test	% Strength Retention > 85	EN 12224	

*Garware Technical Fibres Ltd. reserves the right to change the specifications without prior notice.

*Flexible Rope Net Gabion – is a patented product

TYPICAL MATERIAL SPECIFICATIONS

This is only a general guide for installation – consult the engineering teams on site for site specific solutions.

FRN Gabion preparation steps:

Fix the FRN Gabion into the specified tonnage/ Volume frame for filling which should not have sharp edges at corner or we recommend a pipe structure and a rubber strip placed at all contact points between the netting and filling frame so that product damage is avoided.



Fill and level the boulders as shown in an image

Choose the boulders as per the mesh size table provided. Fill the FRN Gabion with stones. Ensure stones having density of minimum 2.6g/cm³. Generally encouraged to use the stones at site to reduce lead and lift. Ensure no sharp edges on the stones. A different coloured marker rope is provided to guide you in general about the filling level.



After filling is completed, close the ropes and bind the net with rope as shown here. Pass all the overhand ropes through the steel ring provided and knot it



Once knotted through the steel ring, the FRN Gabion is safe to be lifted using the same ring. The filled FRN Gabions can be directly installed using lifting equipment or transported and installed in required sites. Ensure safe working conditions at all times.

GTFL standard terms and conditions apply and are subject to standard warranty terms document.

