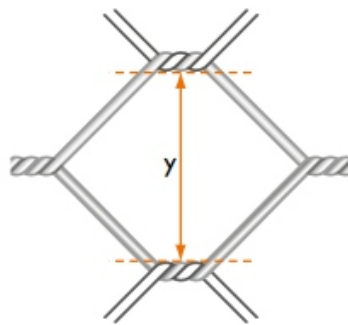


## Gabion Design Specification : Hexagonal Woven Mesh



### SPECIFIED MESH BI-AXIAL WELDED

Nominal dimensions (y) : Gabions, 80mm Mattresses, 60mm

Gabions and geotextiles are normally used together to reduce water velocities and re-capture river bed sediment in streams. Flat Gabions, called River Mattresses are widely used in river courses where soil erosion is a problem over a large flat or sloped area needing protection against soil loss or scour.

### Certification

Our gabion woven mesh is manufactured in South Africa in accordance with the requirements of **SANS 1580:2013** and the international standard **BS EN 10223-3:2013**, ensuring optimal tensile strength, corrosion resistance, and dimensional accuracy. The product is certified by **Agrément South Africa**, in compliance with the **National Building Regulations and Building Standards Act**, guaranteeing quality, structural integrity, and durability. Furthermore, our gabion systems are designed and installed following the guidelines of **SANS 675:2007**, which governs the proper use of gabions and mattresses in civil engineering applications. This ensures sound structural performance in retaining walls, erosion control, embankment stabilisation, and architectural design. Suitable for both local and export projects, our gabion solutions meet rigorous standards for both performance and reliability.

### Materials

The wire used in the manufacture of the gabions and installation accessories shall comply with the following:

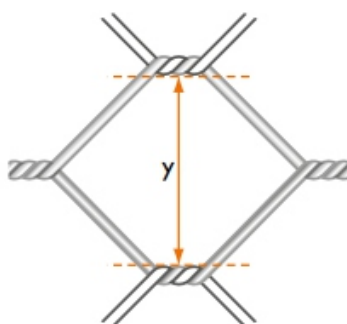
#### Mesh Fabric

The mesh fabric shall be formed by twisting pairs of wires through one and a half turns to form a hexagonal flexible net pattern of nominal size **80mm x 100mm**. The end wires of the mesh panel are terminated by being wrapped around a heavy selvedge wire. The nominal wire diameter for the mesh fabric shall be **2.70mm** and **3.40mm** for the selvedge wire.

All wire is in accordance with the requirements of both **SANS 1580:2013** and the international standard **BS EN 10223-3:2013** with an ultimate tensile strength of between **3500 Kg/m to 5300 Kg/m**.

*\*Note: Where no equivalent **SAZ (Standards Association of Zimbabwe)** standard exists, our products conform to **SANS 1580:2013** and **BS EN 10223-3:2013**, which are recognized and accepted for compliance within Zimbabwean engineering and construction practices under regional harmonization frameworks.*

## Gabion Design Specification : Hexagonal Woven Mesh



### SPECIFIED MESH BI-AXIAL WELDED

Nominal dimensions (y) : Gabions, 80mm Mattresses, 60mm

HEXAGONAL WOVEN MESH GALVANISED AND PVC COATED GALVANISED MESH				
Item	Galvanised Gabions	Galvanised Mattresses	PVC Coated Gabions	PVC Coated Mattresses
Mesh Wire Diameter (mm)	2.7	2.2	2.7	2.2
Salvage Wire Diameter (mm)	3.4	3.4	3.4	3.4
Binding Wire Diameter (mm)	2.2	2.2	2.2	2.2
PVC Coating Thickness (mm)			0.5	0.5
Mesh Aperature (mm)	80 x 100	60 x 80	80 x 100	60 x 80
Tensile Strength - Wire	350-575 Mpa	350-575 Mpa	350-575 Mpa	350-575 Mpa
Galvanising	Class A	Class A	Class A	Class A
Zinc Coating g/m <sup>2</sup>	275 g/m <sup>2</sup>	275 g/m <sup>2</sup>	275 g/m <sup>2</sup>	275 g/m <sup>2</sup>
Wire Breaking Strength	2.2kN	1.7kN	2.2kN	1.7kN
Wire Classification	Mild Tensile Steel	Mild Tensile Steel	Mild Tensile Steel	Mild Tensile Steel
SANS Specs	SANS 23-3:2020	SANS 23-3:2020	SANS 23-3:2020	SANS 23-3:2020
Elongation at Failure %	6 to 7%, in line with weave	6 to 7%, in line with weave	6 to 7%, in line with weave	6 to 7%, in line with weave
Tensile Strength - Woven Mesh - 80x100x2.7mm	4300 Kg/m	4300 Kg/m	4300 Kg/m	4300 Kg/m
Tensile Strength - Woven Mesh - 80x100x3.0mm	5300 Kg/m	5300 Kg/m	5300 Kg/m	5300 Kg/m
Tensile Strength - Woven Mesh - 60x80x2.20mm	N/A	3500Kg/m	N/A	3500Kg/m