

# Permathene Gabion Specification

Gabion, AL-TEN (Al 10%, Zn 90%), Australian manufactured weld mesh.

Production values indicated (average based on 25 tonnes).

Type: Al 10%, Zn 90%

	4mm	5mm
Wire diameter (average)	4.01	4.98
Wire diameter tolerance	+/- 0.08mm	+/- 0.05mm
Wire coating (average)	337g/m <sup>2</sup>	317g/m <sup>2</sup>
Ultimate tensile strength (wire, average)	442 MPa	427 MPa

Permathene gabion meets or exceeds ASTM 974-97 for welded mesh gabions which specifies:

**Tensile Strength:** The steel wire used shall have a tensile strength between 350-750N/mm<sup>2</sup>.

**Elongation:** Elongation shall not be less than 10%.

**Weld Shear Strength:** The depth of the weld pot to be not less than 15% of wire ID.

Weld shear strength to reach a minimum of 50% of wire tensile strength.

**Minimum metallic coatings:** As per BS443 EN10244-2:2001, Table 2, Class A. 4mm (minimum coating 275g/m<sup>2</sup>).

4mm weld mesh is best suited to walls up to 3m in height when filled with rock that meets specification in installation guide (rock should be 60mm - 200mm in size). Where larger rock is used consideration needs to be given to the strength of wire and in these cases 5mm should be used.

5mm Al-Ten has a 56% greater area and is less prone to bending when filling with rock. 5mm is preferred for any walls greater than 3m and especially when larger rock is used which requires packing.



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