

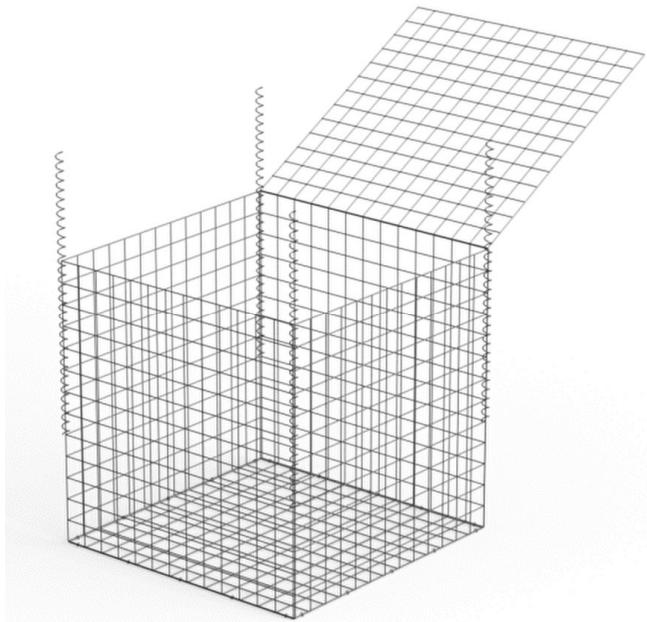
## Installation Accessories

Enviromesh offer a range of accessories to increase the speed and quality of the gabion installation.

### **Helical Binders**

These spirals are used to join multiple panels of mesh simultaneously. The helical binder when spun between the mesh apertures encapsulates the edge wires of each panel preventing them from pulling apart. Helicals can be used to join up to four intersecting panels of mesh. Helicals reduce installation time compared to lacing wire and unlike CL50 clips, require no specialist equipment. Helical binders provide the strongest method of jointing mesh panels.

Helical binders are the preferred jointing method for gabion structures in public spaces and schools as the coils enclose any wire ends at the edge of the mesh panels.



Enviromesh recommend the use of helical binders on the vertical joints only. Horizontal joints are generally closed once the stone has been placed in the gabion, winding the helical through the mesh without it catching on the stone is difficult, also once filled the mesh panels will be under strain and increased friction is built up on the inside of the helical causing it to get stuck halfway along the joint. Lacing wire or CL50 clips should be used to close horizontal joints.

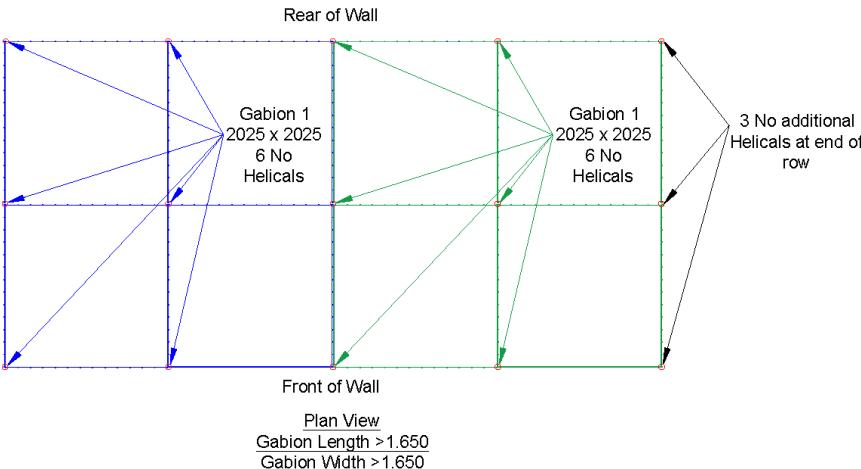
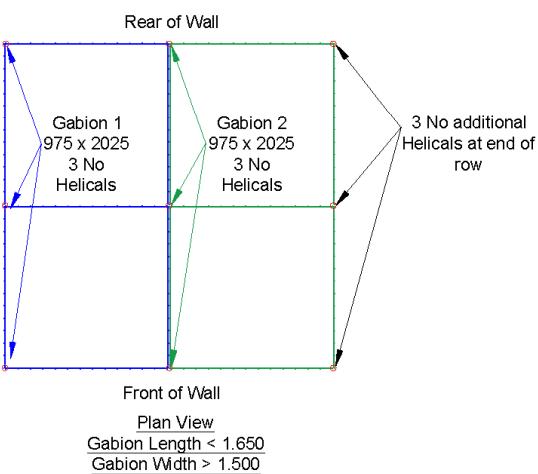
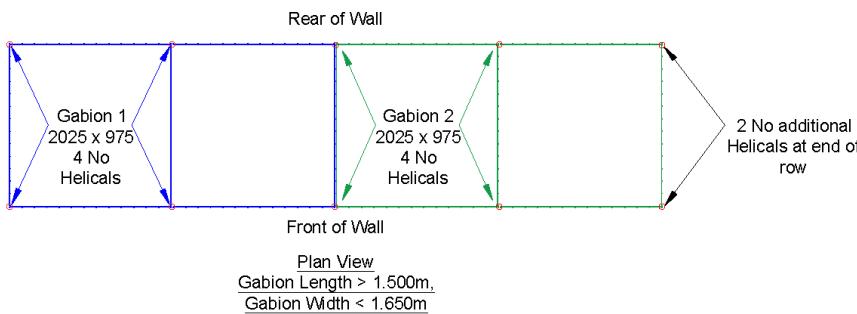
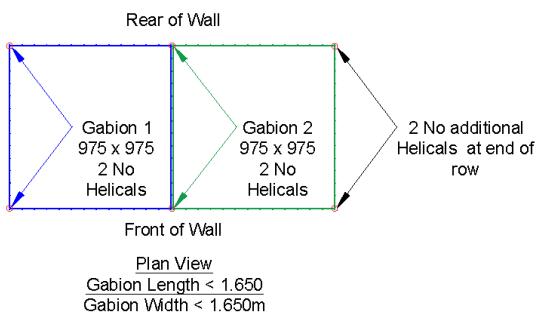
Helical binders are available in either a Galfan® or Galfan®+Performance Polymer Coating to match the specification of the gabion mesh.

Helicals are supplied in either 686mm or 990mm lengths as standard but can be cut to length on site.

Once the helical binder has been installed, using a pair of pliers the top end of the wire should be turned through 90° to hide the loose end.

When constructing gabion seating or benches a row of helical binders is often installed on the leading horizontal edge to prevent anyone hanging their legs over the gabion from coming into contact with the mesh.

Helical binders provide an increased resistance to vandalism as once installed they are virtually impossible to remove due to the pressure acting on the inside of the helical from the filled gabion. The helicals can also be cut without compromising the joint due to the continuous nature of the binder.



### Quantifying Helical Binders

To quantify the number of helical binders required you will need to know:

- The sizes of the gabions
- The quantity of each size of gabion
- The length of each row of gabions

Helicals are used to simultaneously assemble and connect gabions providing a time saving compared to lacing and clipping.

Primarily helicals are installed to the external corners of the gabion however gabions that have a length or width >1.5m will have diaphragm panels dividing the gabion internally to restrict the movement of stone, diaphragms need helical binder too.

Gabions are generally described as Length x Width x Height but this will need to be clarified with the designer.

Rules of thumb for calculating the number of helicals required are:

For any gabion of <1.65m in length and width, 2 helical binders are required for each gabion + an additional 2 for the end of the row.

For any gabion >1.5m in length and < 1.65m in width, 4 helicals should be supplied per gabion with an additional 2 for the end of the row.

For any gabion < 1.65m in length and >1.50m in width, 3 helicals are required per gabion + 3 for the end of the row.

For any gabion >1.65m in both length and width, 6 helicals are required per gabion with an additional 3 for the end of the row.

