



# INSTALLATION GUIDELINES

WELDMESH GABIONS

GAB/G01/0117/V001

# INSTALLATION GUIDE

# WELD MESH GABIONS

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### DELIVERY

Gabions are delivered folded, 'flat-packed' and palletised. Any gabion panel connections for will be via 'C' (or 'Hog') rings. Lacing wire delivered as standard in coils. If required, helicals will be in separate bundles.

### JOINTING

As indicated above, gabion panels will be joined for delivery via 'C' rings. This 'C' ring jointing is for delivery and ease of assembly only and these joints **MUST** be supplemented with either lacing wire or helicals for construction.

### LACING WIRE

- Lacing wire is supplied as standard
- All vertical and horizontal gabion joints must be laced with a continuous length of lacing wire for each joint.
- For a 1m joint this will require approximately 1.4m of lacing wire.
- At the start of each lacing length the lacing wire should be wrapped around the gabion mesh a minimum of three times to secure.
- Lacing wire should be woven in and out of each mesh aperture along the length of the joint and tensioned with each loop to secure the joint.
- At the end of each lacing length the lacing wire should be wrapped around the gabion mesh a minimum of three times to secure.
- Joints between adjacent gabions can be laced together as one operation.

### HELICALS

- Helicals can be supplied on request at an additional cost
- Gabion panels are joined by simply winding the helical down the joint of the two panels thereby causing it to interweave with the two panel meshes.
- At each end of the helical the final helical coil must be bent over through 90° to secure the helical in place.

FIG 1



Gabions arrive on a pallet

FIG 2



Lacing wire used to join panels

FIG 3

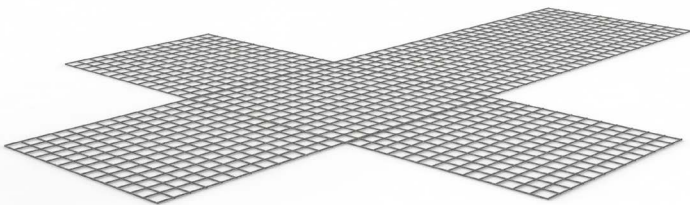


Helicals (an alternative jointing method, sold separately).

### ASSEMBLY

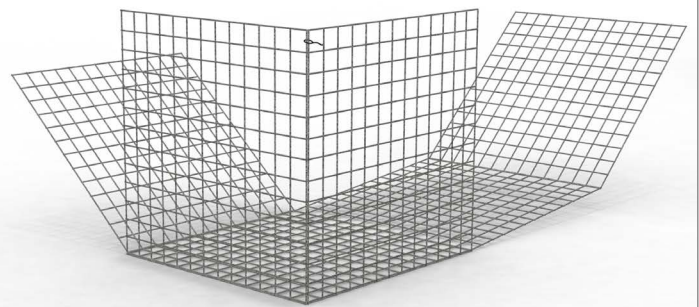
Open out each gabion unit on a flat hard surface and assemble firstly by using cable ties supplied to temporarily secure the unit in box form by jointing side and base panels with lacing wire or helicals as described above. For ease, any joints which are to abut adjacent units can left and joined in combination with those units.

FIG 4



Layout gabion flat before erection

FIG 5



Cable ties (supplied as standard with gabions) are used to temporarily secure the panels prior to lacing.

### REGISTERED OFFICE ADDRESS

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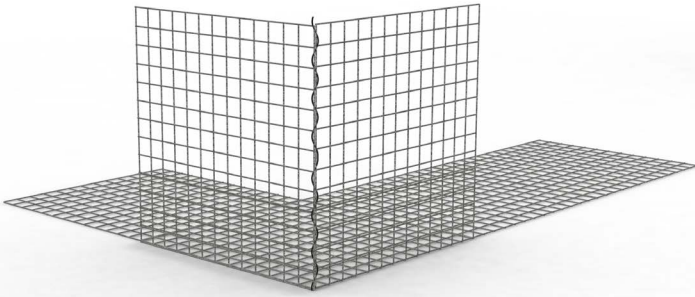
1. TCS Geotechnics Ltd reserves the right to alter product specifications without prior notice.
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3. The above figures are average values obtained from testing to current EN ISO standards
4. TCS Ltd cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
5. Installation details are available on request.



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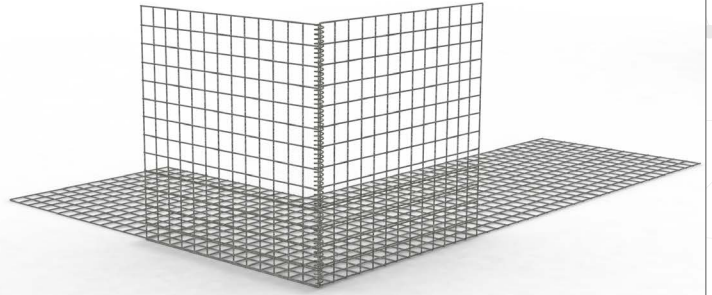
## WELD MESH GABIONS

FIG 6



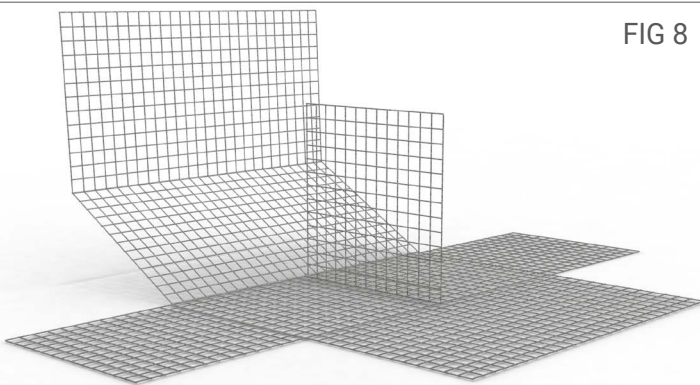
Lacing wire (supplied as standard) used to secure panels (if jointing two gabions then these can be all wired together).

FIG 7



Alternative to Lacing wire are helicals as pictured above (helicals sold separately).

FIG 8



2mtr gabions come with an internal diaphragm.

## INSTALLATION

- Gabions should generally be located on a relatively smooth and firm foundation which is formed to the appropriate line level and gradient. The foundation requirements should be clear from the design drawings but even on relatively firm ground, gabions would typically be placed on 150mm to 200mm of compacted well graded granular material (MOT Type 1 or similar). The foundation of the gabion system is extremely important so if the requirements are not clear please seek guidance from the project design team.
- Lift & position assembled gabion units to line, level and inclination as prescribed by the design drawings and complete any adjacent panel jointing as intimated above.
- Complete all jointing between adjacent gabion units before commencing with any filling operations.
- Most gabion installations will require a geotextile filter layer to be placed to the rear to inhibit the washing of fines from the in-situ ground or backfill into the voids in the gabion stone. A geotextile with TNW1500T specification or similar would typically be used.

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