HOW TO INSTALL Gabion Baskets

What You'll Need:

- Gabion baskets
- Lifting equipment/tools
- Gabion stone
- Corner ties (optional)
- Protective gloves
- Tape measure
- Pliers

PREPARATION

0 Health & Safety

Gabion basket installation instructions are simple, but be sure to wear protective gloves to protect your hands.

Before starting, check all relevant construction, health, and safety guidelines.

Stable Foundation 1

To create a stable foundation for cages, start by removing any organic material that might decompose over time.

Next, lay down a compacted sub-base of Type 1 stone to ensure long-lasting support.

2 Delivered Flat Packed

Cages arrive flat-packed and pre-clipped with steel clips, along with complimentary coils of tying wire.

Additional accessories like helicals for faster setup, corner ties, geotextiles, and stone are also available upon request.

GABION BASKET ASSEMBLY

Unfold the Gabion 3

In the process of how to install gabion baskets, unfold the cage and lay it flat on the ground.

Each cage is made up of 6 panels: the top, bottom, front, back, and two sides.

4 Pre-Clipped

The base of the wire cage comes pre-clipped to all four sides, with the lid securely attached to the back panel.

A) INSTALLATION WITH TYING WIRE

Measure & Cut Tying Wire 5a

Use a wire cutter to cut the tying wire to size. For each meter of gabion length, you'll need about 1.5 meters of wire.

Alternatively, you can estimate the required wire by doubling the length of each panel.

6a Connect with Tying Wire

To connect adjacent panels, use continuous wire.

Begin by wrapping the wire three times around the first mesh hole.

Then, weave it in and out along the edges, creating a double-loop around each hole to increase strength, pulling the wire tight as you go.

Secure Wire at the Top 7a

Finish by wrapping the wire three times around the final mesh hole to secure the connection tightly.

8a Cut off Excess Wire

Once secured, use wire cutters to trim away any excess tying wire.

B) INSTALLATION WITH HELICALS

Calculate Helicals 5b

To speed up assembly, use helicals, each measuring 1 meter in length.

You'll need 4 for the sides and 1 for the lid if you're not using tying wire.

For heights under 1m, cut the helicals to size. For heights over 1m, use a full helical and a cut one.

6b Join Panels

Secure the four corners by twisting the helical through the mesh.

Cut Off Excess 7b

Each helical measures 1 meter in length.

If your cage is shorter than 1 meter, trim the helical to the appropriate size using wire cutters.

9b Fold the End of the Helical

At the top and bottom, use pliers to turn the last coil of the helical vertically by 90 degrees.

This step helps to secure the helical in place and prevent any movement.

FILLING & BRACING

Use Corner Ties 9

To prevent gabion baskets from bulging, use corner ties to secure the corners.

Insert the end of the tie through the mesh at the upper corner, then twist it around the mesh to secure it.

Repeat for the other loop, and continue for each remaining corner.

10 Choosing the Right Stone

Fill the wire cages with angular, interlocking stones to reduce pressure on the sides.

The stones should be larger than the mesh openings, typically ranging from 75mm to 200mm in size.

Choose granite or limestone based on preference.

Fill the Cage 11

Fill the cages slightly above the top edge to accommodate settlement.

The cages can be filled by machine; However, for optimal results and to minimize voids, they should be filled by hand.

CLOSING THE LID

12 Close the Lid

Once the basket is filled, close the lid securely, making sure it fits snugly against the stones without any gaps.

Secure with Tying Wire 13a

Secure the top edges with tying wire, just as you did before.

Cut any excess wire, as described in step 8.

13b Secure with Helicals

Secure the top edges using a helical, following the same method as previously described.

Once secured, trim away any excess helical and you have successfully completed the gabion basket installation.