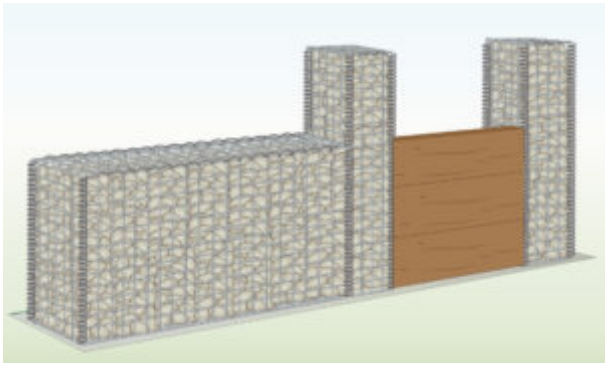
Gabion Fence Installation

Last updated 11 November 2026

Below you will find a step-by-step guide to installing a gabion fence. Gabion fences are tall, narrow and heavy, so please have a quick read of our gabion fence rules before you start.



- ◦ **Experience Required:** Medium
  - ◦ **Tools Required:** Protective gloves, String, Pegs, Shovel, Spirit level, Tape measure, Plate compactor

- **Materials Required:** 4mm or 5mm Gabion baskets, Stone, Helicoils or lacing wire, Type 1 gravel, Geotextile, Supporting posts, Concrete

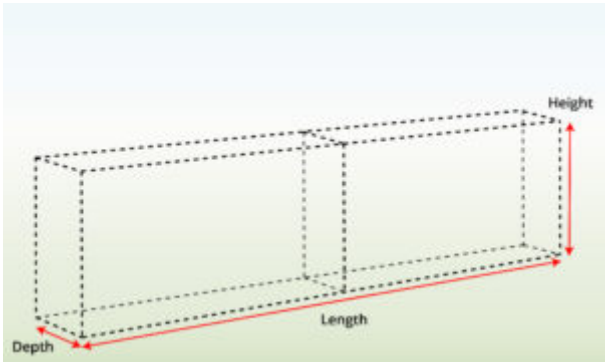
Gabion Fence Rules

Because a fence is tall and narrow and heavy, it's worth planning it carefully so it stays standing for years and it is safe.

- **Support posts:** if your fence will be more than twice as tall as it is deep (for example, over 60cm tall with 30cm-deep baskets), or over 1.5m tall, it needs support posts inside the baskets, as shown in the steps below.
- **When to ask a structural engineer:** for any fence over 1.5m tall, or one beside a path, road, play area or anywhere people gather, we'd recommend having it checked by a structural engineer. They'll set the post size and spacing and the foundation depth.
- **Not for holding back soil:** a gabion fence isn't designed to retain earth. If the ground is higher on one side, follow our gabion retaining wall rules instead.

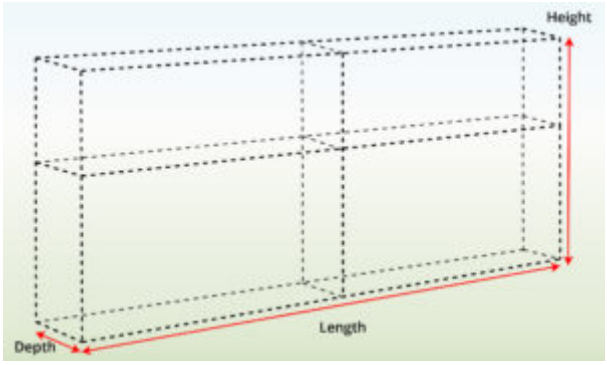
- **Planning permission:** in England, you'll need planning permission for a fence, wall or gate over 1m tall next to a road or footpath, or over 2m tall anywhere else (Planning Portal). If your home is listed or in a designated area such as a conservation area, check with your council first.

Step 1) Measure Area & Plan



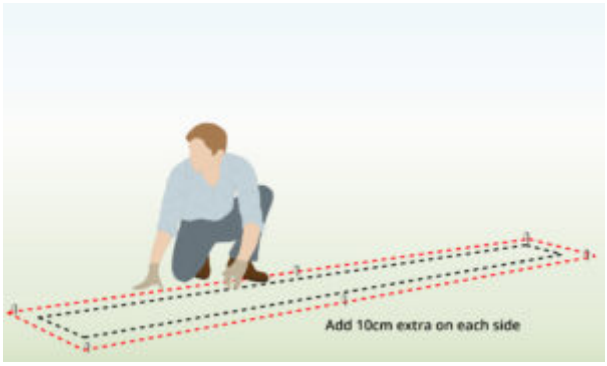
- Begin by measuring your space: how long it is, how much space you have from front to back, and how high you want your DIY gabion fence to be.
- This will help you figure out how many baskets you'll need.
- Also, remember to calculate how much stone you'll need.

Step 2) Plan for Second Layer



- For a fence taller than 1m, think about adding another layer of baskets in your plan.
- Check the gabion fence rules above to see whether your fence needs support posts or an engineer.

Step 3) Mark the Location



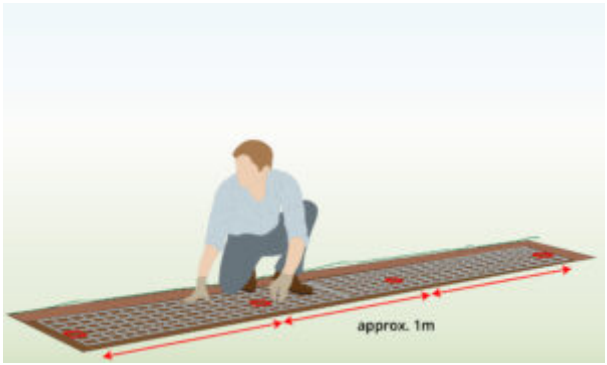
- Mark the fence line with a string and pegs, allowing an extra 10 cm on each side for better alignment and stability.
- The string will ensure everything is straight.

Step 4) Prep the Foundation



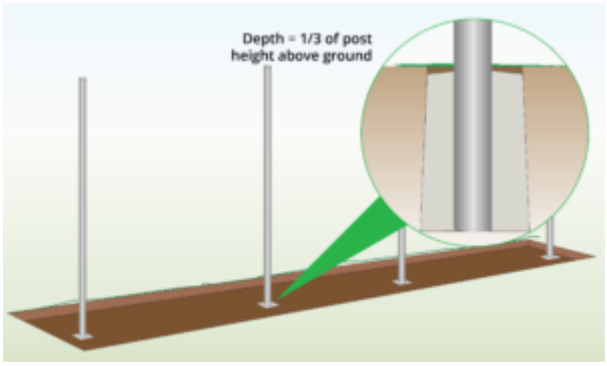
- Use a shovel to dig away the soft topsoil down to firm ground, then level the ground and fill any gaps.
- Ensuring the base is level is crucial for stability.

Step 5) Mark Support Post Location



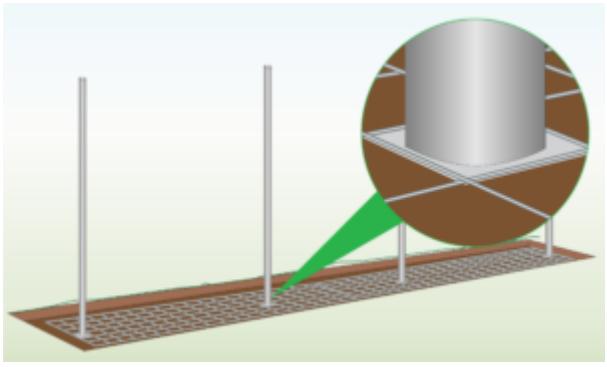
- Remove the lid panels from the baskets and use them to mark the position of the support posts.
- Plan to place each post inside the basket, fitting them through a mesh hole, and space them about 1 metre apart.

Step 6) Add Supports



- Use metal posts (for a medium-sized fence, the equivalent of a scaffold pole) or treated timber posts. If your fence needs an engineer, use the post size they specify.
- Secure the support posts in concrete, sunk about a third of the fence height into the ground. The posts should run at least two-thirds of the way up inside the baskets.
- If the posts are hollow, seal the tops to keep water out.
- **Note**: Make sure the posts are sized to fit through the 75mm x 75mm mesh holes, otherwise you'll need to cut the wires to accommodate them.

Step 7) Check Support Post Location



- Verify the post locations using the same lid panels while the concrete sets.
- Adjust them as needed to ensure they are in the correct positions.
- Use a spirit level to make sure the posts are straight.

Step 8) Add Basecourse



- Lay a compacted type 1 basecourse so the baskets sit level and don't settle. See our gabion wall rules for basecourse depths.

Step 9) Compact Basecourse



- Compact the basecourse thoroughly for stability using either a plate compactor or a spade.
- Then, use a spirit level to check and adjust for straightness.

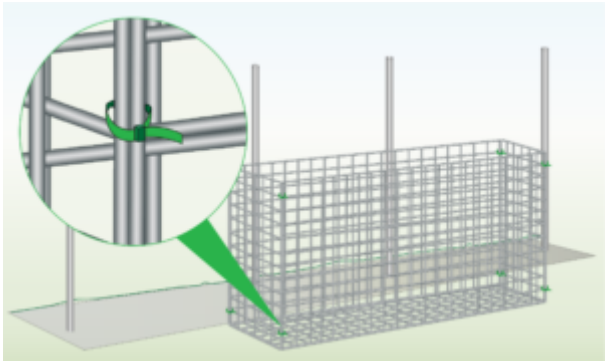
Step 10) Add Geotextile



- To prevent soil erosion and enable drainage, line the bottom of the structure with geotextile fabric.

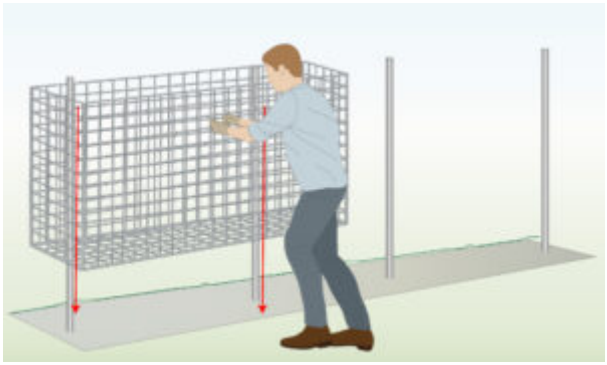
- Cut holes in the fabric for the posts, then position it properly over the basecourse.

Step 11) Pre-Assemble Baskets without Lids



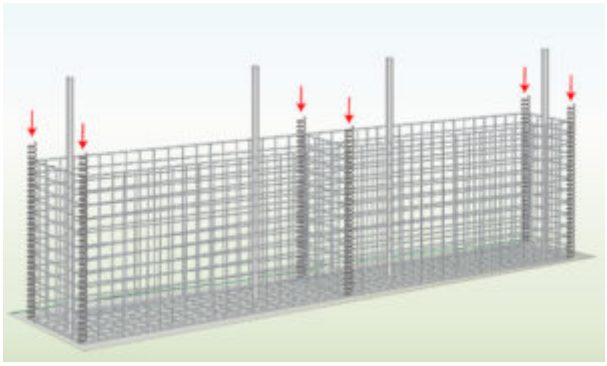
- Fold up the sides of each gabion and hold the vertical corners together with two cable ties, one at the top and one at the bottom.
- The cable ties only hold the basket in shape while you move it into position. You'll join the baskets properly with helicoils in Step 13.

Step 12) Position Around Support Posts



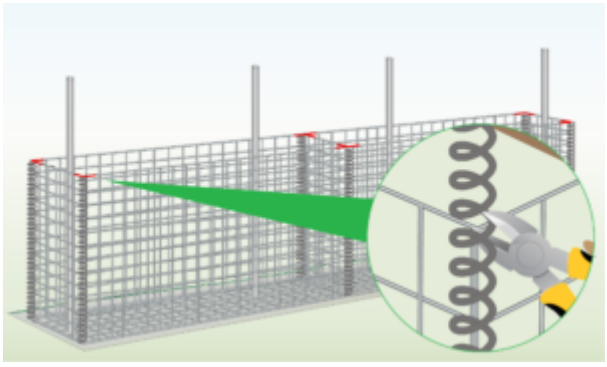
- While positioning the baskets, thread the support posts through the mesh holes in the pre-determined spots.
- Ensure the adjoining corners are pushed as close together as possible.

Step 13) Attach Baskets Together



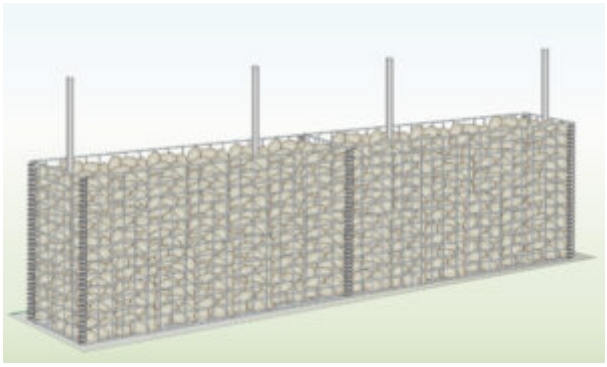
- To prevent any movement, secure the adjoining corners of the baskets with a helicoil.
- One helicoil should connect the corners of two adjoining gabions. Every basket should be joined to the ones beside it, as BBA Certificate 05/4215 requires.

Step 14) Cut Off Excess



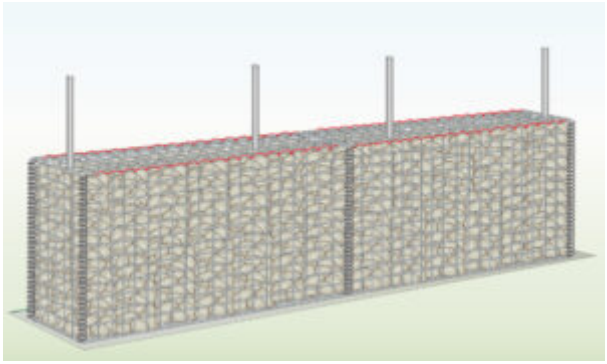
- Trim any excess length of helicoil where necessary.
- Use pliers to pinch each end to secure it and prevent it from slipping out.

Step 15) Fill with Stone



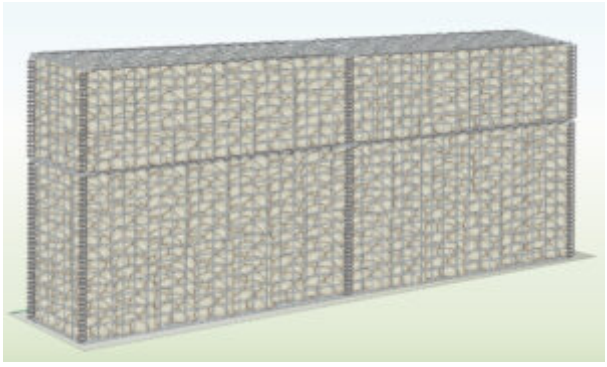
- Fill each basket with the calculated amount of stones, packing it around the posts.
- Add bracing wires as you fill to stop the faces bulging.

Step 16) Attach Lid



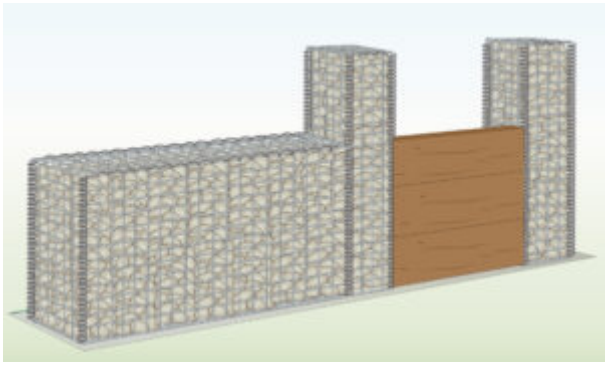
- Close the lids by using lacing wire both in the front and back.
- Ensure they sit comfortably on the stones and there are no gaps.

Step 17) Add Second Layer



- For a taller structure, place the new layer on top of the first layer of stone-filled gabion baskets, threading the support posts through the new baskets.
- Join each new basket to the one below and the ones beside it with helicoils or lacing wire, as BBA Certificate 05/4215 requires.
- Then, fill the second layer of baskets with stones and secure the lids.

Step 18) Hybrid Gabion Fence Installation Structures



- You can combine a column with a short wall or use timber elements in between them.
- This provides many options for creating unique structures, such as walls, garden corners, or barriers.

Gabion Fences in Real Projects

Here are some real gabion fences and tall, narrow gabion walls built from welded gabions like ours. The taller ones have support posts inside, just like the fence in the steps above.



Lucy's gabion fence (June 2024): our Galfan-coated custom gabions filled with limestone and granite, with brick pillars and climbing plants. Her advice: measure carefully and build on strong, level footings. See Lucy's project.



Cindy's front garden fence (June 2024): a low gabion fence beside the pavement, with small plants growing between the stones. From Cindy's customer review.



Premier Inn, Uxbridge (2015): a freestanding gabion screen wall about 2.6m high and 1m deep, filled with granite. Project by Enviromesh, our partner company, using the same welded gabions we supply. See Enviromesh's case study.



The Helix, Falkirk (2012): post-supported freestanding gabion walls about 3m high and 1m deep, filled with locally available stone, for Falkirk Council and British Waterways. Project by Enviromesh, our partner company, using the same welded gabions we supply. See Enviromesh's case study.



Trent Valley Crematorium (2017): two post-supported gabion walls about 3m high and 1m deep, made from 4mm Galfan-coated welded mesh and filled with Yorkshire walling stone, with the layout designed by Enviromesh. Project by Enviromesh, our partner company, using the same welded gabions we supply. See Enviromesh's case study.

TIPS

Before starting your gabion fence project, it's important to plan carefully and consider a few key factors. The points below are based on our team's experience designing and installing gabion structures.

- It's advisable to opt for 4mm or 5mm baskets over the 3mm ones to prevent bulging, thus ensuring structural stability and strength.

- Depth is usually small, so supporting posts are needed to ensure maximum stability and also reduce the risk of collapse.
- You can play with the shape of your structure & create a unique gabion fence installation design by adding different elements like columns or timbering.
- You can calculate how much stone you'll need using our stone calculator.
- To make sure the edges stay straight you can use the free lacing wire to create internal bracing.
- Use corner braces for a quicker bracing technique.
- Check your fence from time to time, especially after storms, for bulging, leaning or damaged wire.

FURTHER READING

- How to Lace Gabion Baskets – Instructions on how to lace baskets
- How to Fill Gabions – Learn how to fill cages using different methods
- How to Build a Gabion Wall – Our rules for freestanding and retaining gabion walls
- Gabion Learning Hub – a library of help videos

VIDEO

Video: Watch the video on YouTube

Written By

This blog was created by our Technical Illustrator, Timi Szabo, and reviewed by our Founder, John Marlen-Summers.

Below you'll find examples of our real-life gabion fence builds, along with customer projects. We've opted for technical illustrations for the instructions found in this blog because they provide better clarity on mesh placement and structural details that can get lost in real-life photography.

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A gabion fence at the new Wire Fence warehouse.

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John giving a tour of the new warehouse location featuring the gabion fence.

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This customer project shows this gabion fence guide brought to life in a creative way.