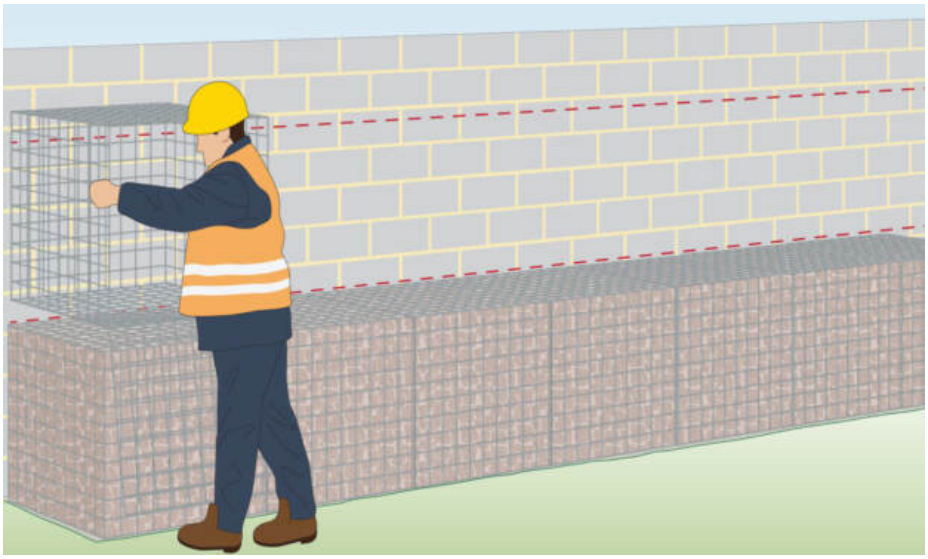
How to Install Gabion Cladding

Last updated 11 November 2026

Below is a step by step guide on how to install gabion cladding using two different methods. Gabion cladding is heavy, so please read our gabion cladding rules first. They explain which projects you can do yourself and when you need a structural engineer.



- **Difficulty level:** High
- **Tools Required:** Shovel, Spirit Level, Bolt Cutters, Pliers, Protective Gloves
- **Materials Required:** Gabions, Gabion Stone, Helicoils/Lacing Wire, Bracing Wire, Support Posts, Concrete, Clamp Plates and Wall Fixings (Method 2, as specified by your engineer), Lintel (Optional), Angle Section (Optional), Clamp Bar (Optional)

GABION CLADDING RULES

Gabion cladding is heavy. Plan your cladding as a structure, not a decoration.

When You Need a Structural Engineer

Have a structural engineer design your cladding before you order or build if any of these apply:

- It will be fixed, tied or pinned to a building or wall (Method 2 below).
- It will be over 1.5m tall.

- It goes over or around a door, window or other opening.
- It is on a public, commercial or school building, or beside a path, road or play area.
- The wall behind it is old, cracked, hollow or timber-framed, or you don't know how it is built.

The engineer will set the post size and spacing, the foundation depth and the type and number of wall fixings. Fixings into an existing wall should be pull-out tested by a competent tester, in line with BS 8539.

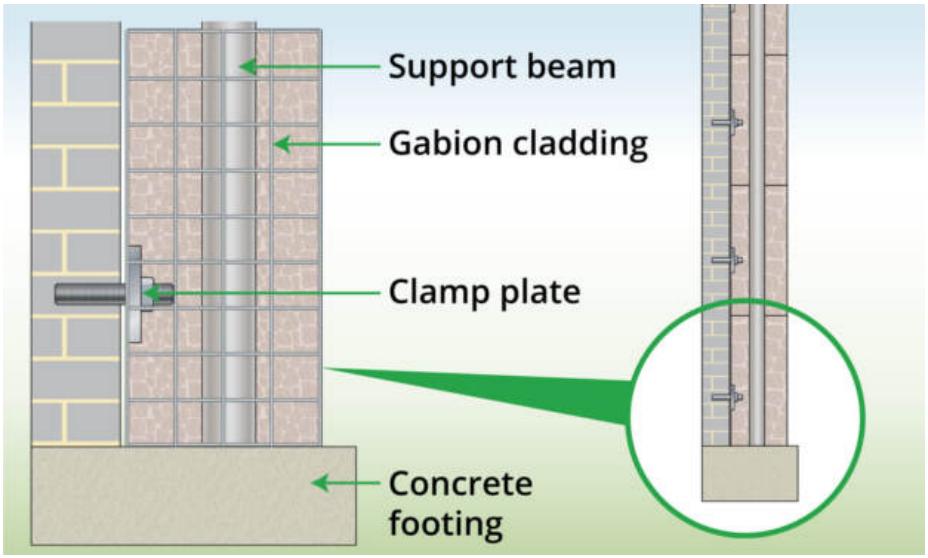
Freestanding cladding up to 1.5m tall, standing on its own foundation and not fixed to the wall, can be a DIY project. Follow Method 1 below.

Rules for Every Cladding Project

- **The weight goes into the ground, not the wall.** Build on a concrete foundation, with support posts set in concrete about a third of the cladding's height deep and roughly one post per metre.
- **Keep a gap between the cladding and the wall** so the stone never touches it. Don't cover the damp-proof course, air bricks, weep vents, flues or meters.
- **Fire:** steel and natural stone are classed as non-combustible (Class A1). Only fill the cages with stone, never timber or plastic.
- **Building regulations** may apply if you re-clad 25% or more of a wall, and the wall has to be checked for the extra weight and for weather resistance. Check with your local building control before you start.
- **Planning:** you need planning permission to clad a house in a Conservation Area, National Park, National Landscape (AONB) or the Broads, and listed building consent for a listed building. Elsewhere the cladding must look similar to the house's existing materials, and stone on a brick house may not count, so check with your council.

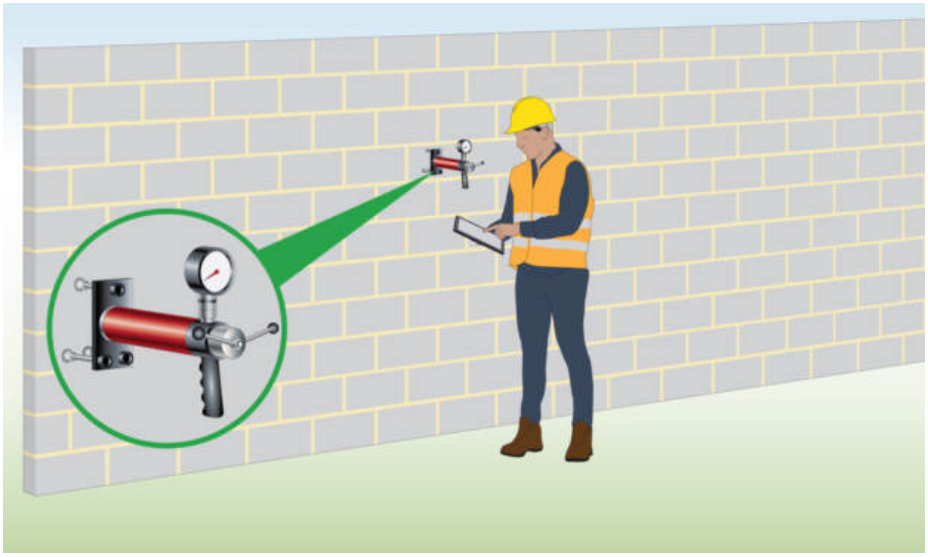
METHOD 1: FREESTANDING WITH SUPPORT POSTS

Anatomy of Typical Installation



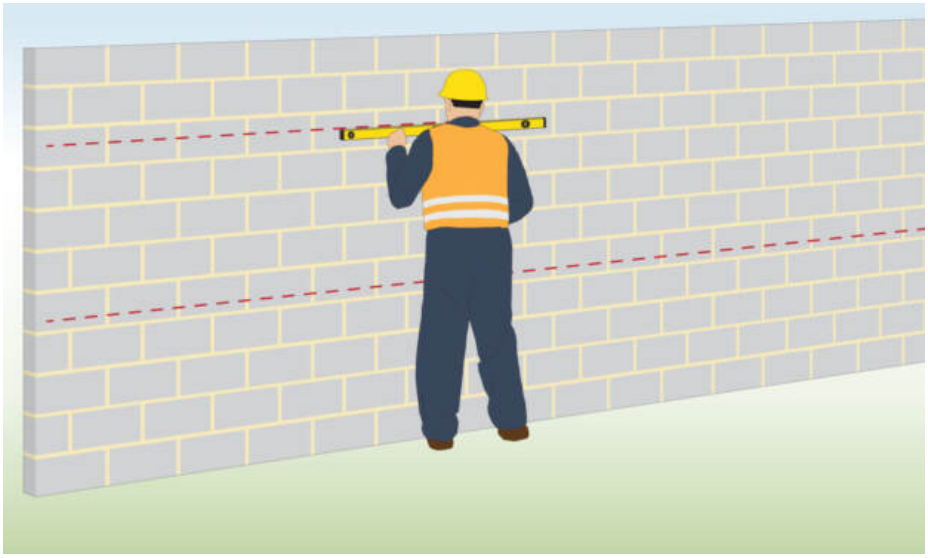
- The cladding stands on its own concrete foundation, held up by support posts, so the building doesn't carry its weight.
- You can build this yourself up to 1.5m tall. Over 1.5m, on a public or commercial building, or anywhere it is fixed to the wall, have it designed by a structural engineer.

Step 1) Check Your Project



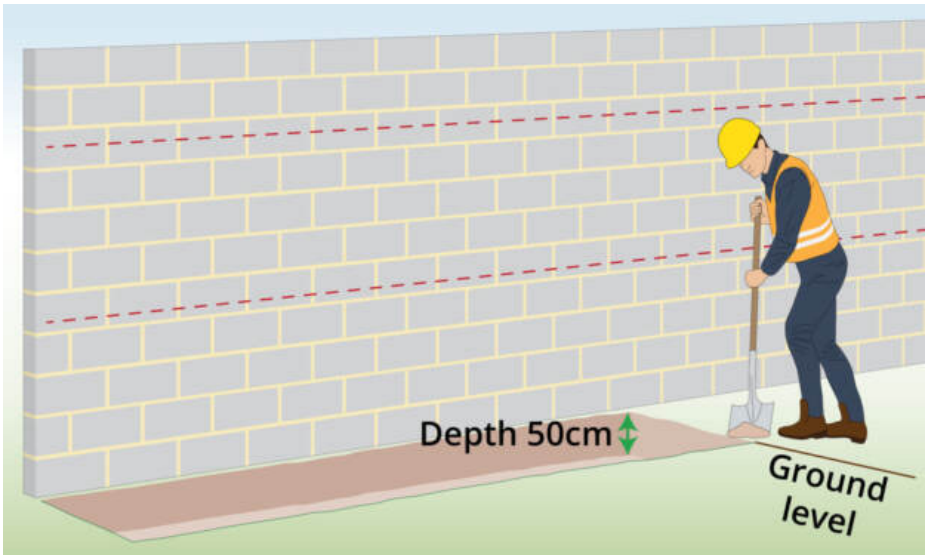
- Check your project against our gabion cladding rules above: height, location, planning and building regulations.
- If any of the engineer checks apply, have the cladding designed before you dig, and follow your engineer's post and foundation sizes.

Step 2) Mark The Area



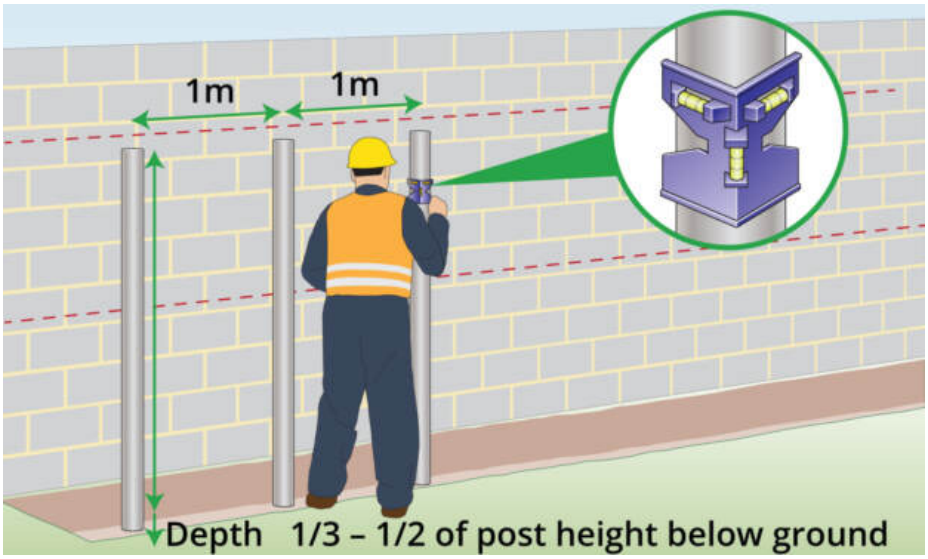
- Mark out where the cladding and each post will go, about 1 metre apart.
- Leave a gap between the back of the cladding and the wall so the stone will never touch it.
- Use a spirit or laser level so everything is level from the start.

Step 3) Dig the Foundation



- Dig a hole for each post, about a third of the cladding's height deep. For 1.5m cladding, that's about 50cm.
- Dig out the base of the cladding 10-15cm deep so the concrete covers it.

Step 4) Install the Support Posts



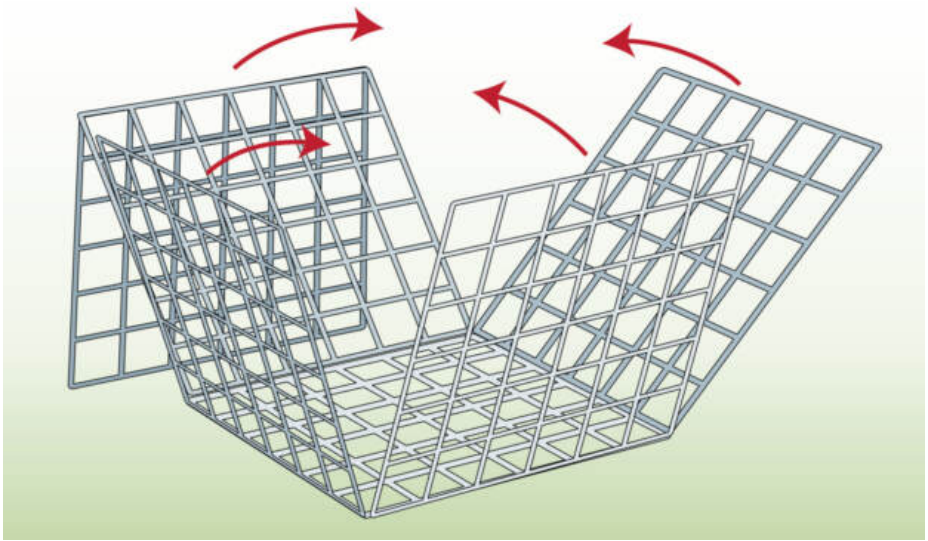
- Stand a metal or treated timber post in each hole, about 1 metre apart.
- The posts go inside the gabions and should run at least two-thirds of the way up them.
- Check each post is upright with a spirit level. If the posts are hollow, seal the tops to keep water out.

Step 5) Pour the Concrete



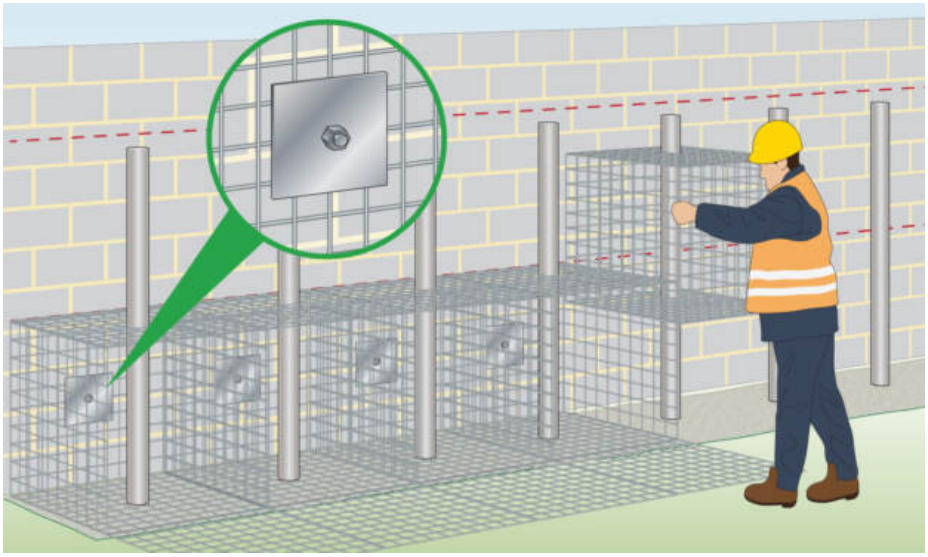
- Fill the holes and the base with concrete, keeping the posts upright as you go.
- Smooth the top so it's flat and level, then leave it to set before you add the baskets. Check the bag for setting times.
- The gabions sit straight on the concrete. No gravel or basecourse is needed.

Step 6) Assemble the Baskets



- Fold the 4 side panels up from the base, ensuring the lid is falling backwards and resting.
- Join the corners together.

Step 7) Fit Over the Posts



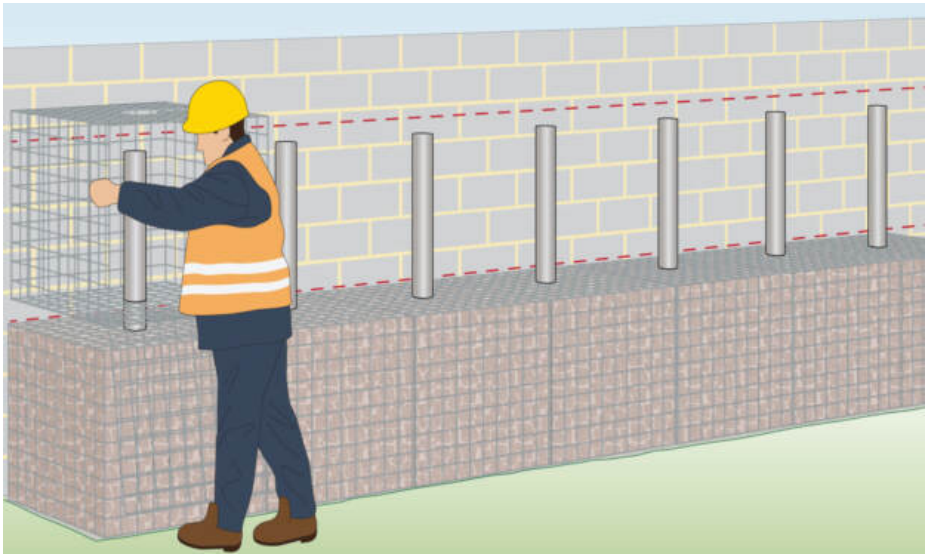
- Lower the baskets over the support posts, allowing the posts to pass through the mesh. If the posts don't fit through the 75 mm × 75 mm mesh openings, cut a larger hole with bolt cutters.
- Fix each post to its basket with bracing wire.
- Don't fix the cladding to the wall unless a structural engineer has specified the fixings.

Step 8) Fill with Stone



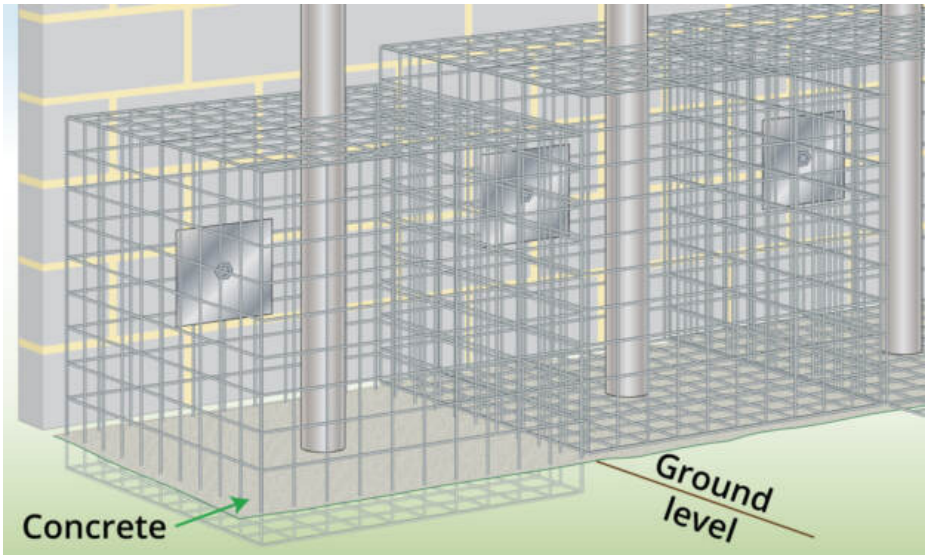
- Fill the baskets with stone, packing it around the posts.
- Add bracing wires as you fill to stop the faces bulging, then close and secure the lids.

Step 9) Repeat Steps



- Repeat Steps 6-8 for each row, joining each new row to the one below with helicoils.

Optional Step 1) Set Into the Ground



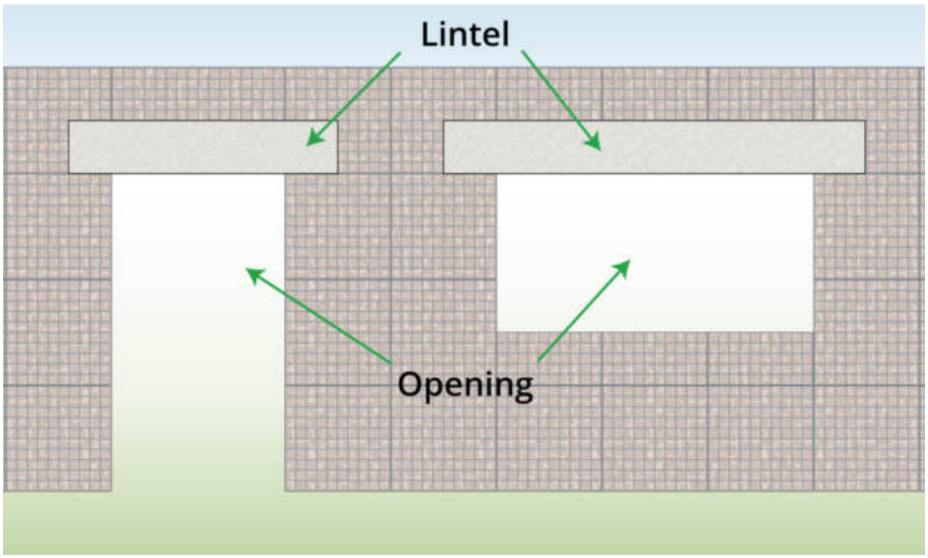
- For added stability, you can set the first row slightly into the ground or the concrete.

Optional Step 2) Angle Section and Clamp



- An angle section and clamp bar can tie the cladding back to the building for extra support.
- This fixes the cladding to the wall, so only do it with fixings specified by a structural engineer.

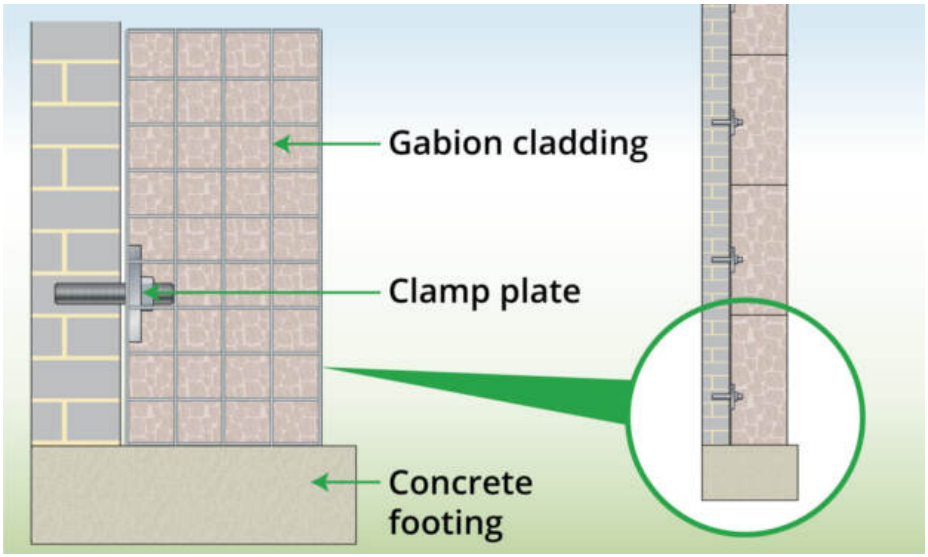
Optional Step 3) Add an Opening



- For any door or window openings, you'll need a lintel to carry the gabions above.
- Openings need a structural engineer to size the lintel and its supports.

METHOD 2: FIXED TO A WALL (ENGINEER-DESIGNED)

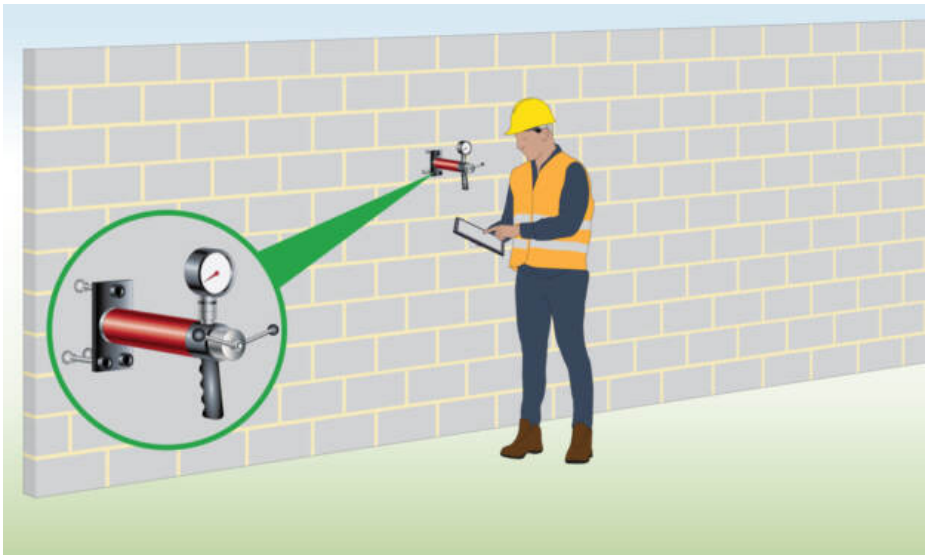
Anatomy of Typical Installation



- The cladding is fixed back to the building wall with clamp plates, so the wall helps hold it in place.

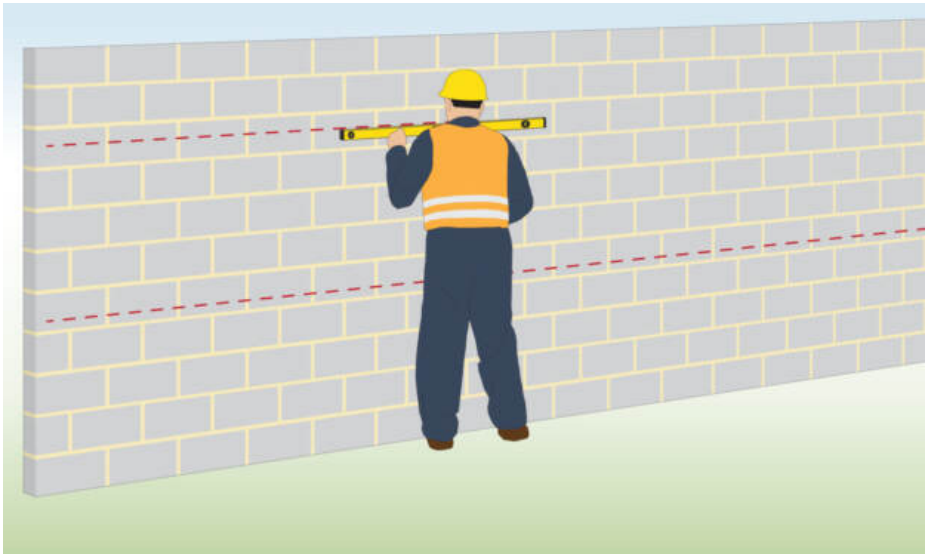
- Only use this method when a structural engineer has confirmed the wall can take the load and has specified the fixings.

Step 1) Get It Designed



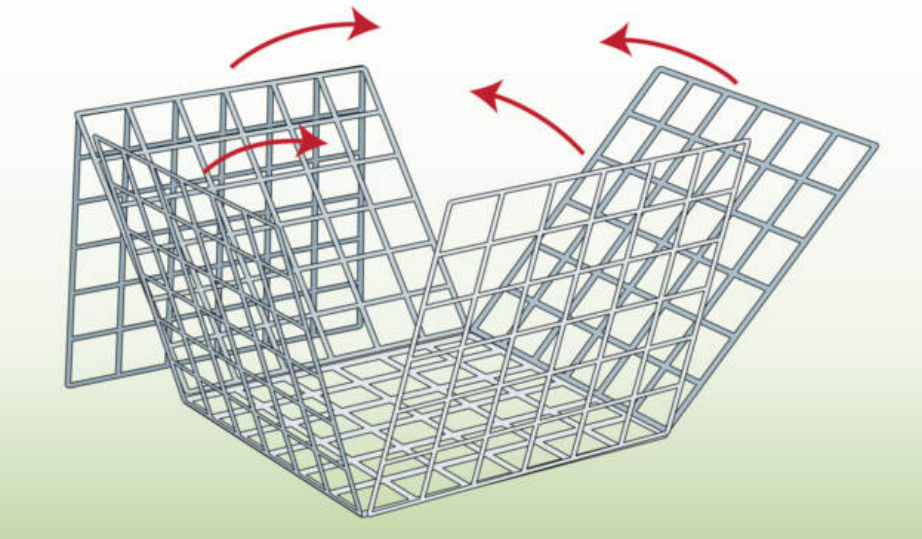
- Have a structural engineer check the wall and design the foundation and fixings.
- The fixings should be pull-out tested in the wall by a competent tester, in line with BS 8539.
- Check our gabion cladding rules above for planning and building regulations.

Step 2) Mark Area



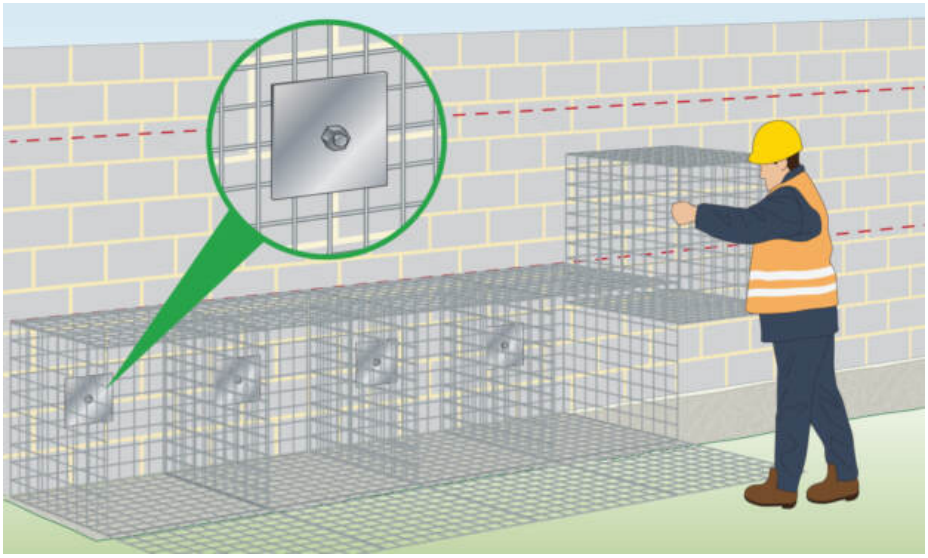
- Mark out the cladding and the fixing positions from your engineer's drawings.
- Use a spirit or laser level so everything is level from the start.

Step 3) Prepare the Base and Assemble the Baskets



- Build the foundation your engineer has specified. The cladding must stand on it, not hang from the wall.
- Assemble the baskets for the first row.

Step 4) Attach to The Wall



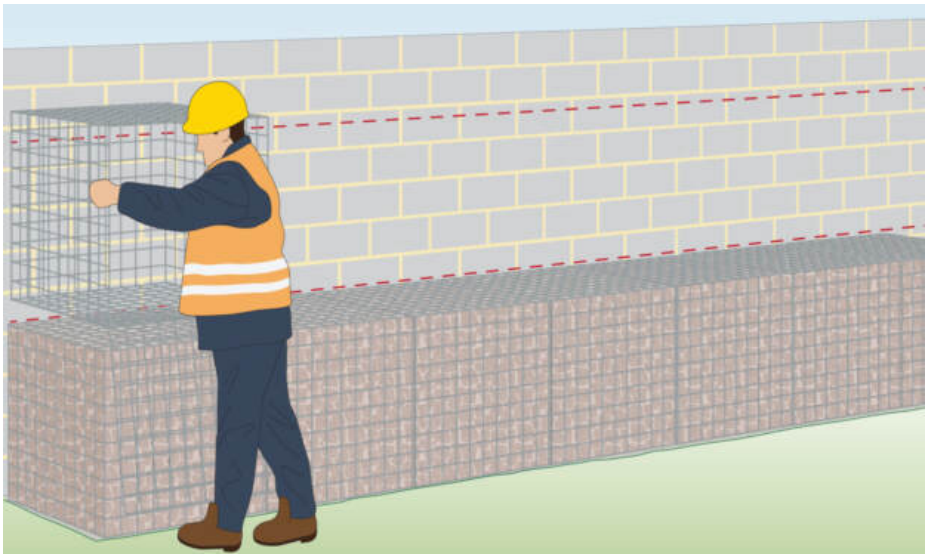
- Stand the first row on the foundation, keeping the gap to the wall.
- Fix it to the wall with the clamp plates and fixings your engineer has specified.

Step 5) Fill The Gabions



- Fill the first row with stone, adding bracing wires as you go, then close and secure the lids.

Step 6) Repeat Steps



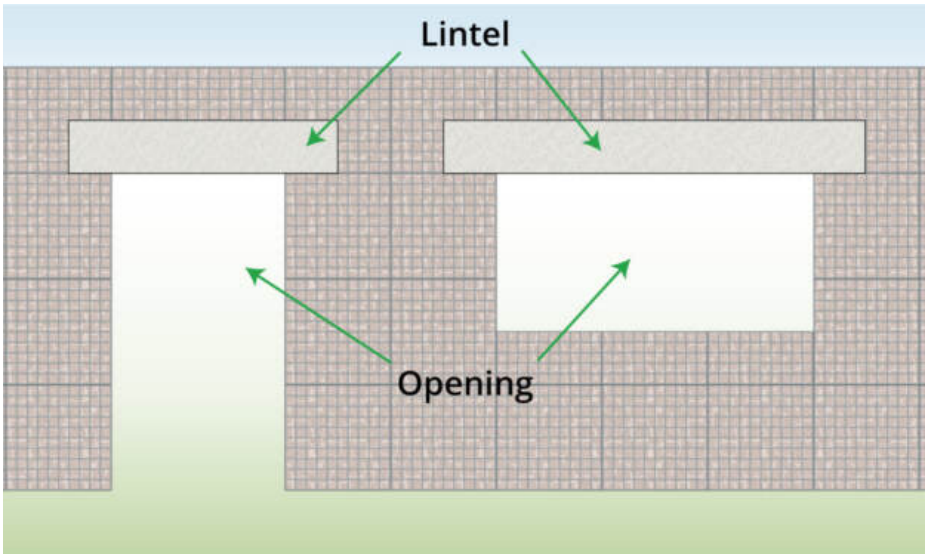
- Repeat Steps 3-5 for each row, joining each new row to the one below with helicoils.

Optional Step 1) Angle Section and Clamp



- An angle section and clamp bar can give the cladding extra support, where your engineer specifies it.

Optional Step 2) Add an Opening



- If your cladding includes doors or windows, you'll need a lintel above each opening, sized by your engineer.

Gabion Cladding in Real Projects

Here's how finished gabion cladding looks on real buildings, from one of our customers and from Enviromesh, our partner company. Projects on public and commercial buildings like these need a structural engineer, as our gabion cladding rules above explain.

From our customers



Peter's cladding project (July 2024): 33 of our welded gabion cages, photographed while being filled. See Peter's project in our July 2024 customer projects.

Commercial projects by Enviromesh



Gunnersbury Park Sports Hub, London (2020): 4mm welded gabions filled with limestone, with the basket corners lined up vertically and horizontally for a neat finish. Project by Enviromesh, our partner company, using the same welded gabions we supply. See the case study.



Teagasc NASRIC, Johnstown Castle, Ireland (2025): about 154m² of 4mm welded gabion cladding filled with granite. Project by Enviromesh, our partner company, using the same welded gabions we supply. See the case study.



Lee Valley Ice Centre, London (2023): a gabion facade of 4mm welded baskets filled with limestone, with climbers trained up the mesh. Project by Enviromesh, our partner company, using the same welded gabions we supply. Photo: LDA Design, shared by Enviromesh with permission. See the case study.



Pwllheli Sailing Club, North Wales (2015): architectural gabion cladding, photographed during the build. Project by Enviromesh, our partner company, using the same welded gabions we supply.



Walthamstow Stadium, London (2016): welded gabion cladding over the steel sheet piles beside the River Ching, held on a steel frame system that Enviromesh designed and bolted to the piles. Project by Enviromesh, our partner company, using the same welded gabions we supply. See Enviromesh's case study.

Tips & Tricks

- Dry-fit the cages first. Before securing everything permanently, place the baskets in position to make sure the posts, openings, and fixings all line up as expected.
- Fill the baskets in layers. We recommend filling in stages and checking the basket faces regularly to keep them straight and prevent bulging.
- For the best finish, add bracing wires as you fill the baskets. This helps maintain the basket's shape and creates a straighter, more professional-looking wall.
- Keep your best-looking stones for the visible faces.
- Check the cladding from time to time, especially after storms, for bulging, leaning or damaged wire.
- Helicoil connectors can be used to assemble the gabions while also joining adjacent baskets in a single step.

FURTHER READING

- How to Fill Gabions – Multiple ways to fill gabion baskets.
- Gabion Cladding at Gunnersbury Park Sports Hub – A case study on a cladding project at Gunnersbury Park Sports Hub.
- How to Assemble a Gabion Basket – Step by step instructions.
- How to Build a Gabion Wall – Our rules for freestanding and retaining gabion walls.

VIDEO

Video: Watch the video on YouTube

Written By

This blog was created by our Campaign Content Coordinator, Timi Schmidt, and reviewed by our Sales Support Specialist, Erno Szabo.

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. You can see finished projects in Gabion Cladding in Real Projects above.