

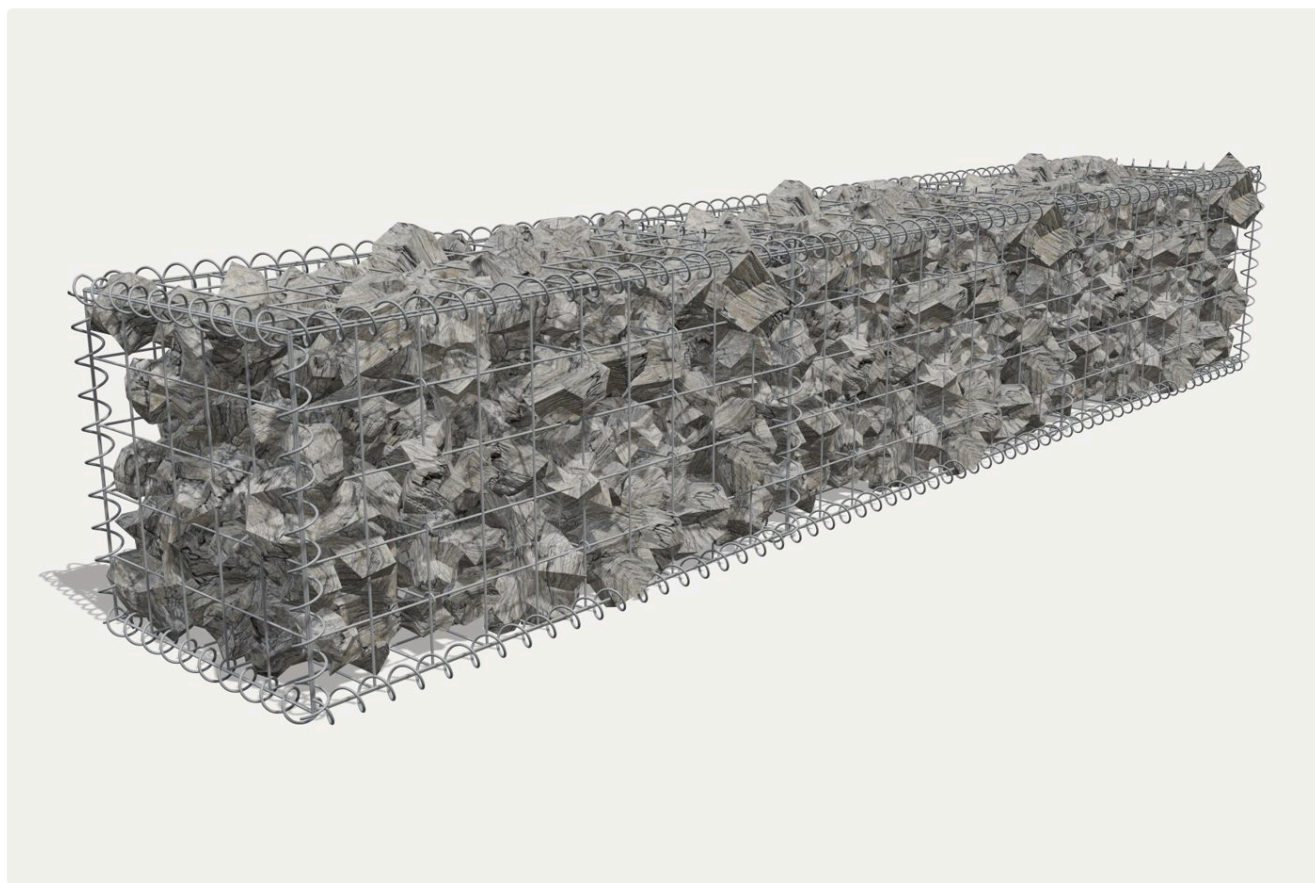
GABION BASKETS

Assembly instructions

Welded wire mesh · made to size in our own factory in Andrychów

www.hd-gabion.pl

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Before you start

How it works. The basket is delivered flat, as separate panels. You or your contractor assemble the basket on site. This can be done by hand, without machinery. HD-GABION does not carry out assembly.

Contents 1. What is included in the delivery 2. Assembling the basket (steps 1–8) 3. Baskets side by side 4. Baskets stacked on top of each other 5. Common mistakes 6. Contact and documents

Tools

- Work gloves — compulsory
- Safety glasses
- Tape measure
- Spirit level
- Pliers. If you choose C-rings instead of spirals, you will need C-ring pliers.
- Rubber or plastic mallet — taps spacers into place without damaging the coating
- Bucket for the stone

No tools for forcing anything. Everything should fit and turn together loosely, without force. If a spiral is hard to turn, a panel is not sitting correctly: reposition it, do not force anything.

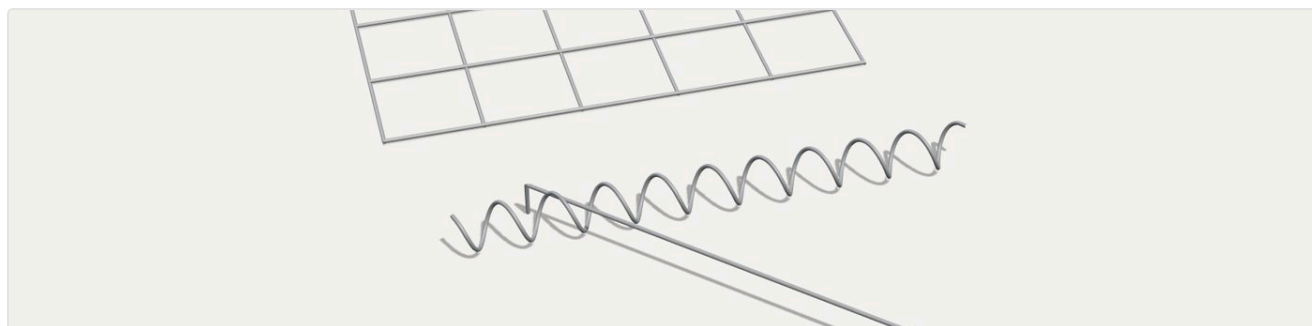
Caution — safety. Always wear gloves: the wire ends are sharp. Wear safety glasses when turning in spirals and when tipping in stone.

Caution — ground and structure. Place the baskets on level, compacted ground. The stability of the structure, the foundation and the drainage are decided by the client's designer. HD-GABION supplies the baskets and the materials list according to the dimensions provided.

Tip — soft ground. On soft or wet ground, a layer of geotextile beneath the baskets is good practice: it keeps the soil and the fill separated. The ground itself remains the client's responsibility.



What is included in the delivery



Part	What it is
Panels	Base, two long walls (front/back), two end walls, lid. Welded mesh of Ø 4 mm wire.
Spirals	Connect the panels along every edge. Made of the same wire as the panels.
C-rings (on request, instead of spirals)	Supplied if you choose them. They are crimped around two edge wires with C-ring pliers, roughly every 20 cm.
Spacers	Straight wires with a hook at each end. They hold the front and back walls apart, so the basket does not bulge.
Diaphragms	For baskets longer than 1 m: roughly one diaphragm per metre. A 2 m basket has one, a 3 m basket two.

Material

- Wire: standard Ø 4,0 mm; on request Ø 4,5 or 5,0 mm.
- Coating: standard Hard Bezinal® (zinc-aluminium ZnAl 95/5, min. 350 g/m²) on panels, spirals and spacers. C-rings: Galfan, min. 255 g/m².
- On request: black wire, hot-dip galvanised after welding.
- Mesh size of the walls: 100 × 100, 100 × 50 or 50 × 100 mm. Base and lid: always 100 × 100 mm.
- Dimensions: each side from 10 to 300 cm, made to size.

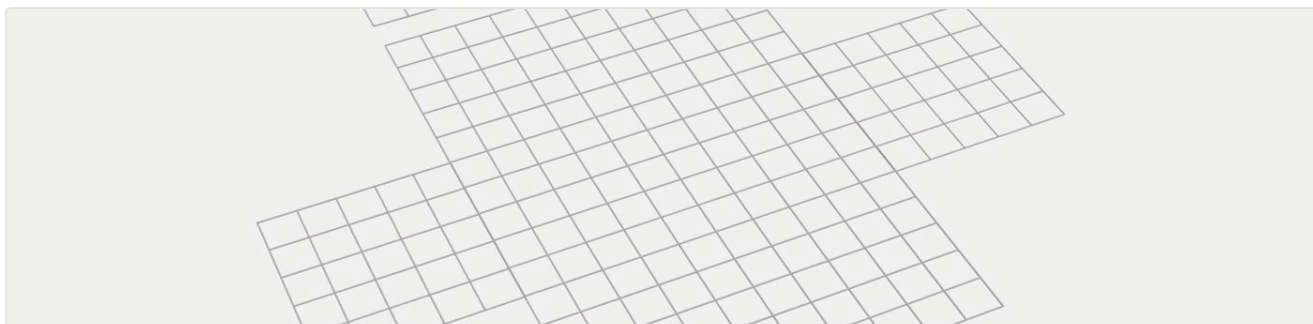
Tip. Check everything as you unpack, before you start. If anything is not right, call us straight away.

Caution — wall made of several baskets. Where baskets stand next to or on top of each other, they share a panel. You will therefore receive fewer than six panels per basket. This is correct (see pages 8 and 9).

Your 3D drawing. A 3D drawing of your baskets is included with your quotation. The **Assembly** button in that drawing shows step by step how the basket goes together. Keep it to hand while you work.

Assembling the basket (1)

Step 1 — Lay the panels out flat



Choose a level spot, preferably right at the final position. Lay down the base. Lay the four walls flat around the base, each against its own edge.

Tip. Assemble the basket where it is to stay. Once filled, a basket can no longer be moved.

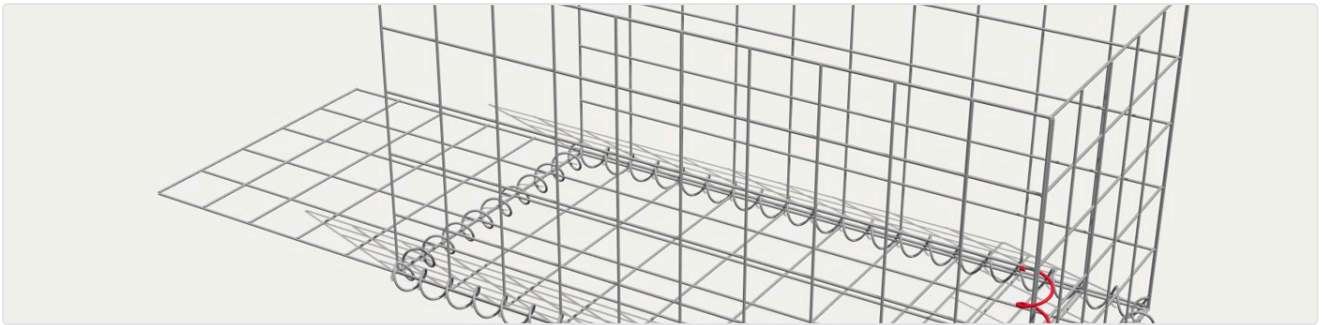
Step 2 — Turn in the bottom spirals

Turn a spiral in along every edge of the base. The spiral grips the edge wire of the base and of the wall. Work slowly, one spiral at a time.

After turning each spiral in, bend the end over or squeeze it shut with the pliers. It can then no longer unwind.

Assembling the basket (2)

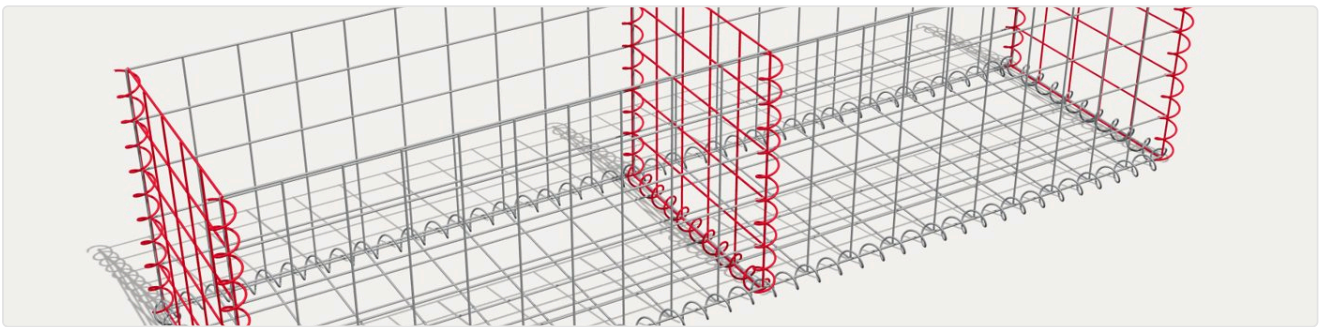
Step 3 — Raise the sides



Fold two adjacent walls up. Hold them together and turn the corner spiral in from top to bottom. Do this at all four corners.

Tip. Work in pairs: one person holds the walls upright, the other turns.

Step 4 — End walls and diaphragm



Check that the end walls are square. If the basket is longer than 1 m, fit the diaphragm. Secure it with spirals on three edges: the two upright edges and the bottom edge.

Caution. The diaphragm is not a spare part. It keeps the long walls straight while filling.

Assembling the basket (3)

Step 5 — Spacers: how they work



A spacer is a straight wire with a hook at each end. It hooks around a mesh wire and holds two walls apart, so the basket does not bulge when the stone goes in. Tap it into place with the rubber mallet.

- Most spacers go **between the front and back walls**, across the short dimension of the basket.
- Also fit a few **from the front and back walls to the end walls**, close to the corners. That is where the basket will bulge first. These are the same spacers.
- Distribute them evenly, using your own judgement. The number per basket is given on your materials list; a basket of 100 × 50 × 50 cm, for example, has twelve.

Fit them while filling, not beforehand. Fill about 20 cm of stone at a time, then fit a row of spacers, then fill the next 20 cm. A basket 50 cm high will therefore have two rows. In this way each spacer rests on the stone and can be hooked in properly (see step 7).

Step 6 — Fix the lid along one edge

Lay the lid on the basket. Fix one long edge with a single long spiral. This acts as a hinge. Fold the lid open.

Filling and closing

Step 7 — Filling in layers



Fill the basket in layers, evenly along the whole length. After each layer of about 20 cm, fit a row of spacers (step 5), then add the next layer. Let the stone settle gently into the basket; do not drop it from a height. Compact each layer and check that the walls stay straight.

Tip — a neat face. Place the stones on the visible face by hand. Turn them so that they do not protrude through the mesh.

Tip — spacers. Stone can knock a spacer loose. Check while filling that they are still properly in place.

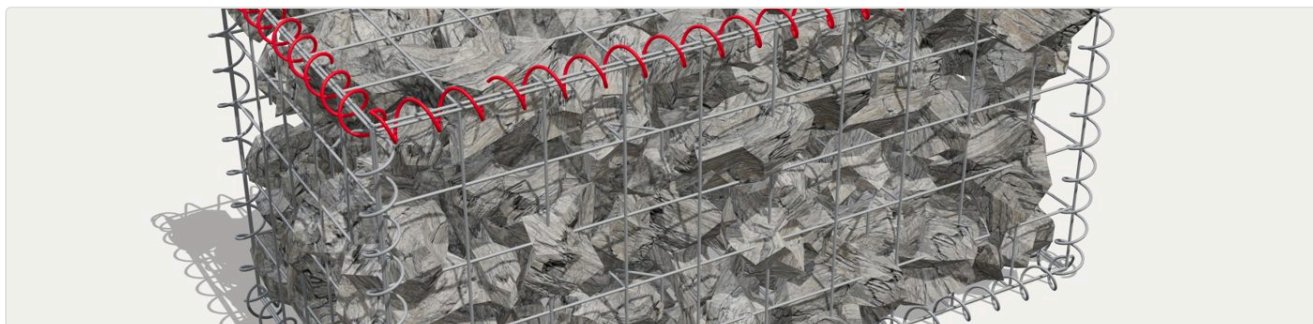
Caution. Never fill one side or one cell completely first. The stone will then push the wall out of line.

Which stone?

- Clean crushed stone, free of sand, clay or soil. Dirt washes out with the rain and the fill then settles.
- Frost-resistant natural stone, for example granite or basalt.
- Size: **60 to 120 mm**. Always larger than the mesh opening, so that the stone cannot fall through.

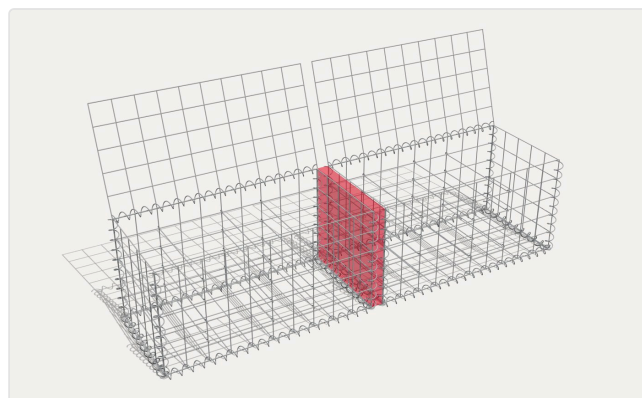
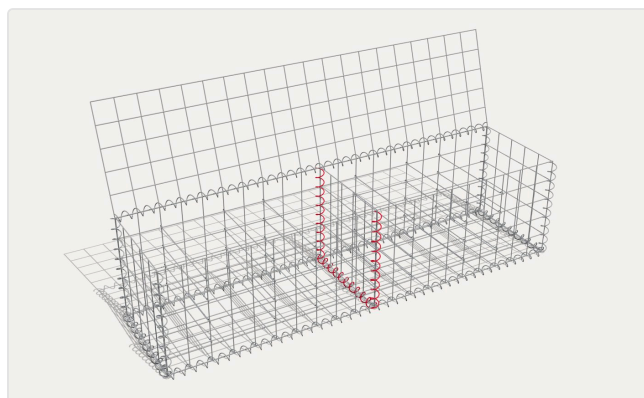
How much stone? As a non-binding guide, allow about 1,7 tonnes per cubic metre of basket. Fill up to the edge and no higher: well-compacted stone will not settle further after filling.

Step 8 — Closing the lid



Fold the lid down. Turn the spirals in along the three open edges. The diaphragm is not fixed to the lid.

Baskets side by side



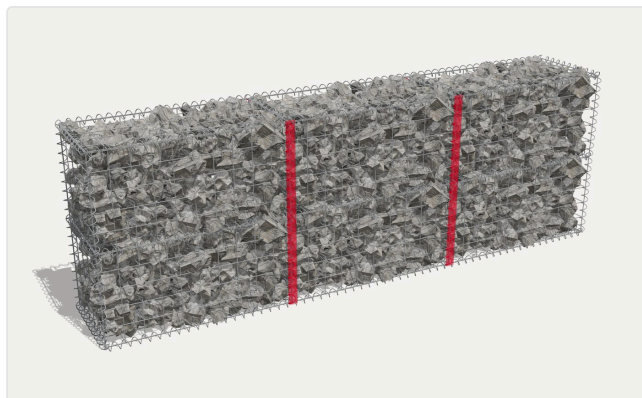
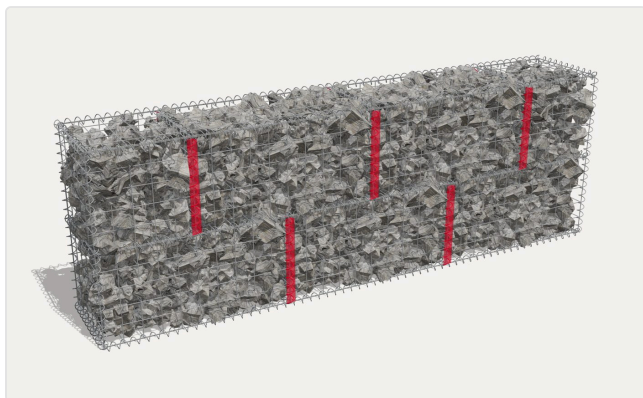
Baskets in a row share their end wall. There is therefore only one panel between two baskets.

1. Assemble the first basket (steps 1–5). 2. Place the next basket against it, without its own end wall on that side. 3. Turn in the spirals: the walls of both baskets fixed to the one shared panel. 4. Fill adjacent baskets at the same time, layer by layer.

Correct (09-naast-goed.png): one shared end wall, spiralled to both baskets. **Wrong** (10-naast-fout.png): each basket with its own end wall, two panels back to back.

Tip. Fill neighbouring baskets equally. If one is full and the other empty, the stone will push the shared panel out of line.

Baskets stacked on top of each other



A basket placed on another basket has no base of its own. The lid of the lower basket is the base of the upper one.

1. Fill and close the lower layer. 2. Place the walls of the upper basket directly on the lid below. 3. Turn a spiral in along **all four** bottom edges, fixed to the lid below. 4. Stagger the vertical joints: for example, start the second layer with a half basket (stretcher bond).

Caution — the most important spirals in the whole wall. The spirals between two layers stop the upper layer from tipping. Do not skip any, not even where a basket is set back and stands in the middle of the lid below.

Correct (11-op-elkaar-goed.png): the upper basket stands on the lid of the lower one, one panel in between. **Wrong** (12-op-elkaar-fout.png): a lid and a separate base on top of each other — two panels between the layers.

Common mistakes

Mistake	Consequence	How to do it correctly
Two end walls back to back	Double mesh, row runs out of dimension	One shared panel (page 8)
Lid and base on top of each other between two layers	Double mesh, layers poorly connected	Lid = base of the next layer (page 9)
Spacers forgotten or knocked loose	Walls bulge	Fit all spacers and check them while filling
Diaphragm left out	Long walls bulge	Fix the diaphragm on three edges
One side filled first	Basket pulls out of line	Fill evenly in layers
Dirty or undersized stone	Fill settles or falls through the mesh	Clean crushed stone, larger than the mesh opening
Spiral between the layers skipped	Upper layer can tip	Spiral all four bottom edges
Ground not level or not compacted	Wall settles or goes out of plumb	Level, compacted ground; design by the client's designer

Contact and documents

Questions about assembly? Call or email us.

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Full documents

- Assembly instructions (baskets, fences, Defence) and drawings: hd-gabion.pl/instrukcje-montazu
- Technical data sheet for gabion baskets and the full ITB report: hd-gabion.pl/jakosc-i-dokumenty

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