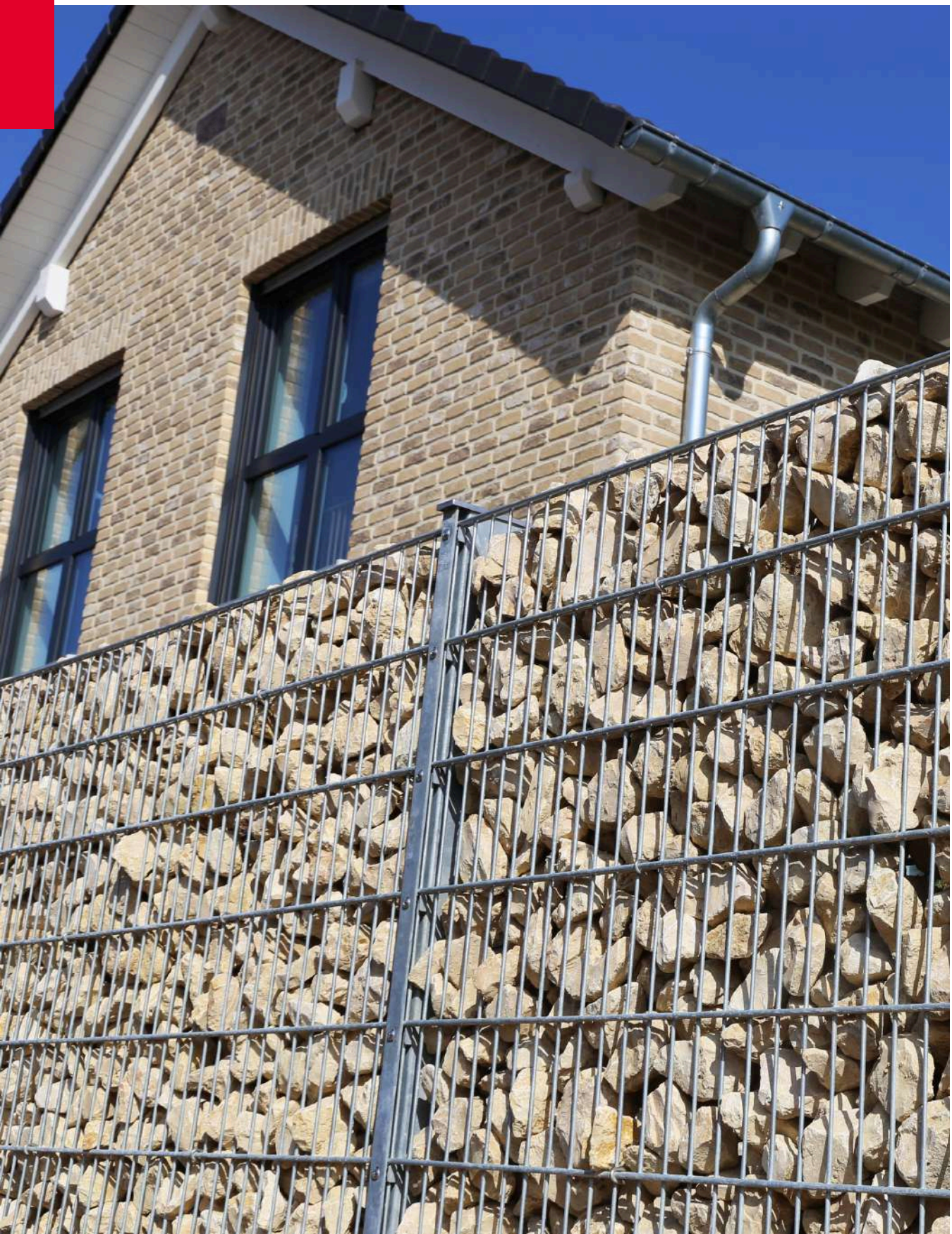
ASSEMBLY INSTRUCTIONS

GABION FENCES

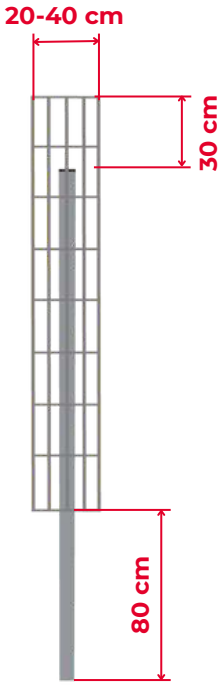


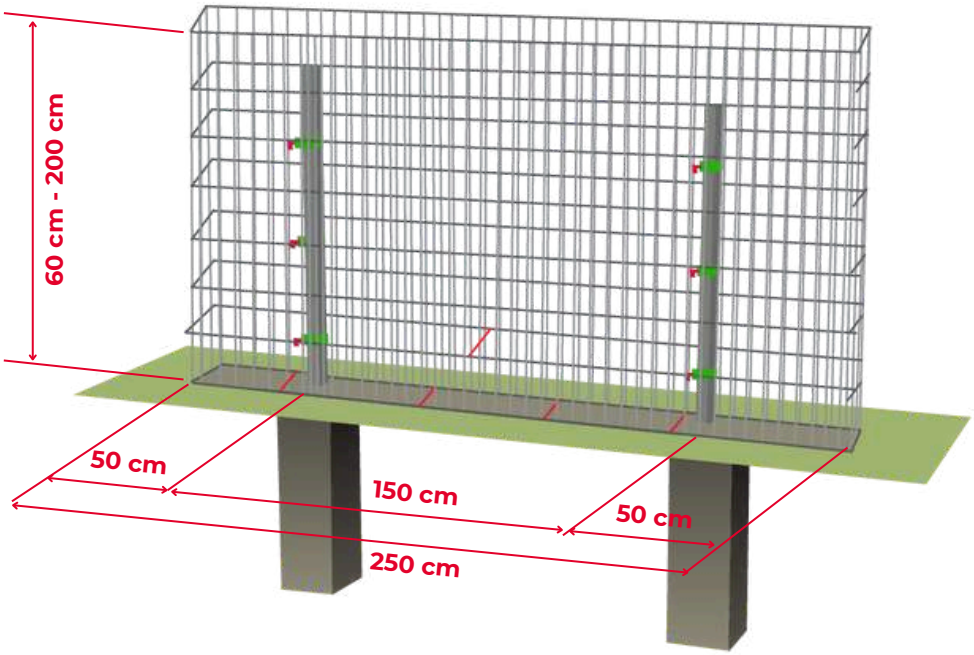
All drawings are for illustrative purposes only. All rights reserved by HD-Gabion. Use of the catalogue content is permitted only with the written consent of the owner.

TABLE OF CONTENTS

1. DESCRIPTION OF THE GABION FENCE 2
2. FENCE COMPONENTS 2
3. TOOLS REQUIRED FOR ASSEMBLY 3
4. 2 OPTIONS FOR POST INSTALLATION 3
5. GABION FENCE BASE – INSTALLATION IN CONCRETE
6. PROCEDURE FOR INSTALLING POSTS IN A 250 CM CONCRETE FENCE 4
7. PROCEDURE FOR INSTALLING SUPPORTS 5
8. PROCEDURE FOR PANEL INSTALLATION 6
9. FENCE ALIGNMENT 7
10. INSTALLATION OF DIVIDERS 8
11. PROCEDURE FOR FILLING THE FENCE WITH AGGREGATE 9
12. CORRECT PLACEMENT OF DIVIDERS 10
13. ERRORS WHEN INSTALLING DIVIDERS 10
14. PROCEDURE FOR INSTALLING POSTS ON A SLAB 11
15. ASSEMBLY OF GABION STRUCTURES LONGER THAN 250 CM 12
16. INSTALLATION OF THE CORNER SECTION OF THE FENCE 13
17. MOST COMMON ASSEMBLY ERRORS AND RECOMMENDATIONS 14 15

DESCRIPTION OF THE GABION FENCE





FENCE COMPONENTS

FENCE POST
6x4 cm

SEPARATE PANEL

SUPPORT WITH M6 SCREW

M6 SCREW AND NUT

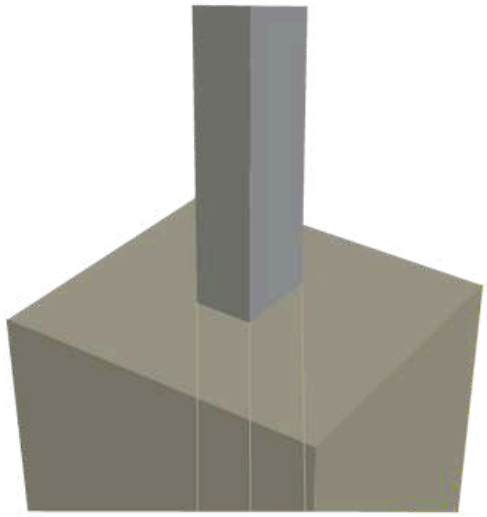
DIVIDERS

POST COVER

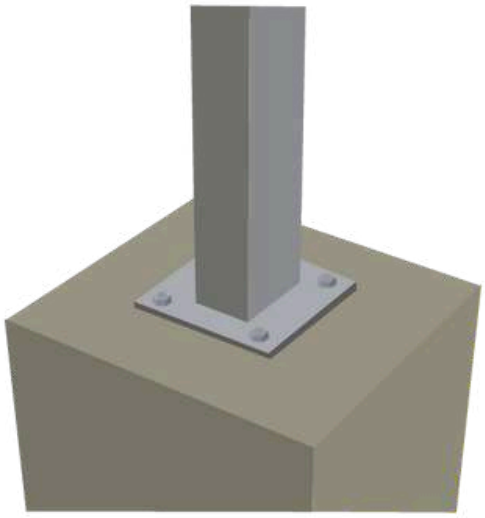
TOOLS REQUIRED FOR ASSEMBLY

- Bucket for aggregate
- Ratchet
- Measuring tape
- Rubber or plastic mallet
- Level
- Tools for digging holes

2 OPTIONS FOR POST INSTALLATION

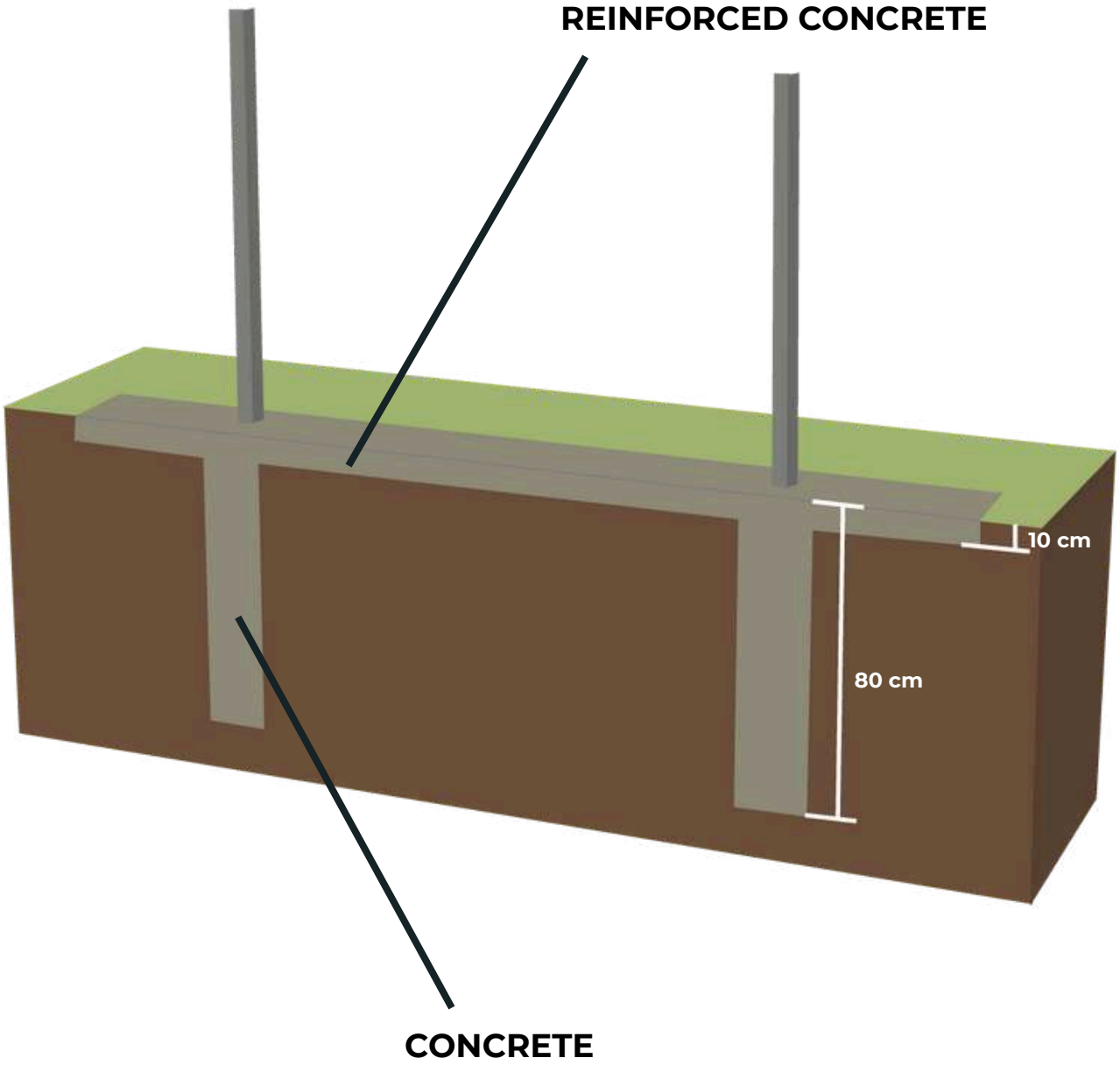


Post in concrete



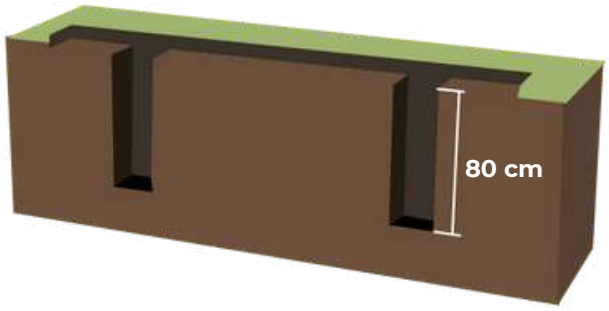
Post on a slab

GABION FENCE BASE – INSTALLATION IN CONCRETE

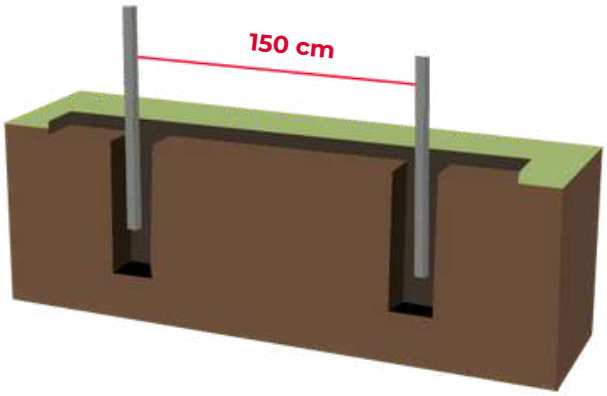


PROCEDURE FOR INSTALLING POSTS IN A 250 CM CONCRETE FENCE

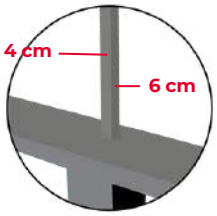
First, dig holes for post installation and concreting, spaced 150 cm apart along the axis. Depth: 60–80 cm, preferably below the frost line.

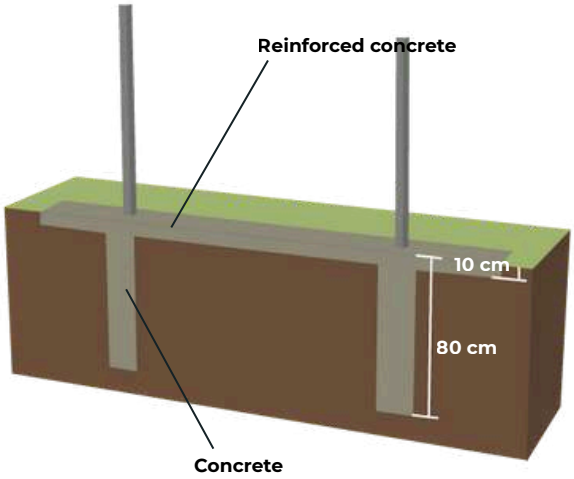


After digging the holes, the posts are installed at 150 cm intervals.



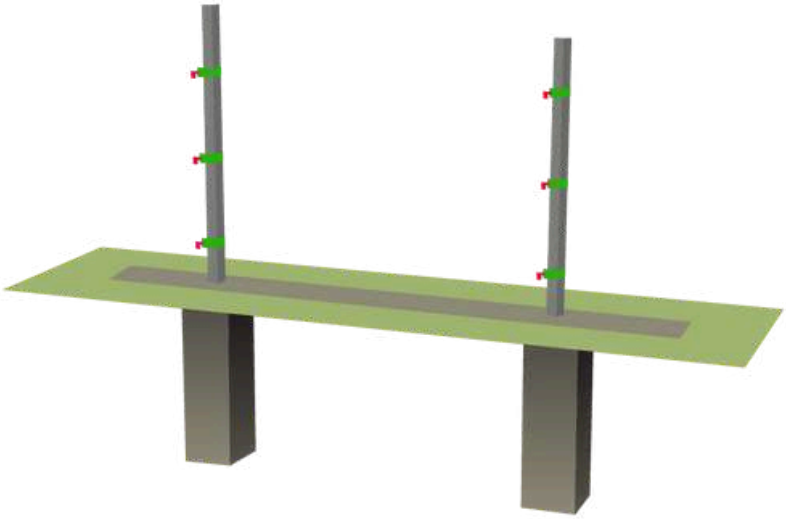
Once the posts are positioned, proceed with concreting. A semi-dry concrete mix is recommended to prevent the posts from shifting. 6×4 cm posts must be properly oriented in the holes.





PROCEDURE FOR INSTALLING SUPPORTS

Attach the required number of supports with spacer bars to each post set in concrete (Fig. a, b). The supports are initially fixed at the desired height using M6 screws (Fig. c), allowing for later adjustment. The number of supports per post is provided on page 10.



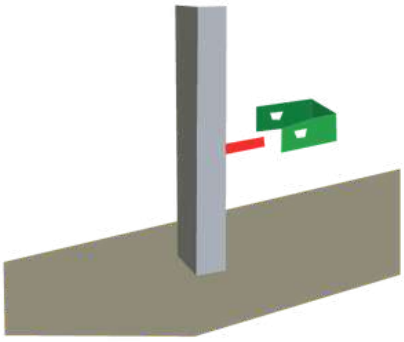


fig. a

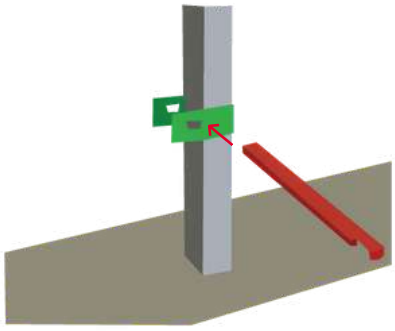


fig. b

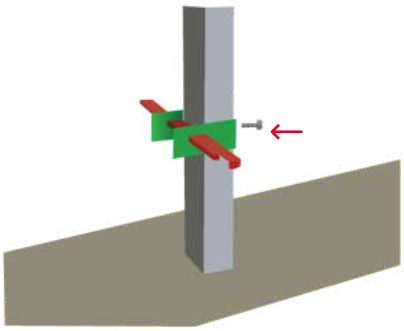
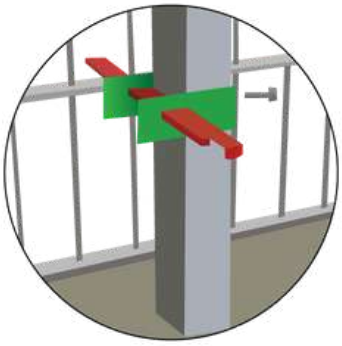
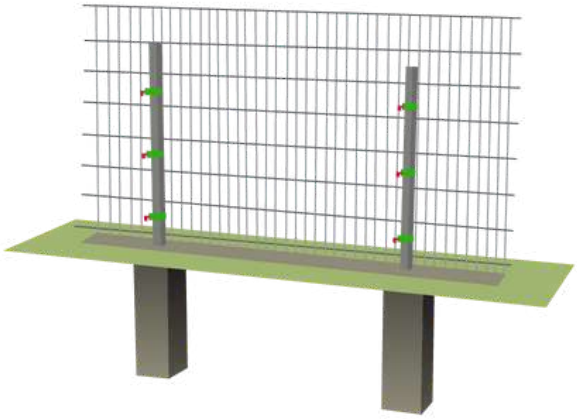


fig. c

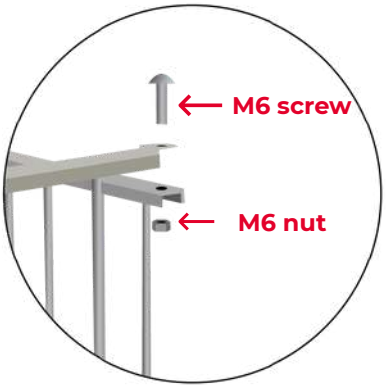
PANEL INSTALLATION PROCEDURE

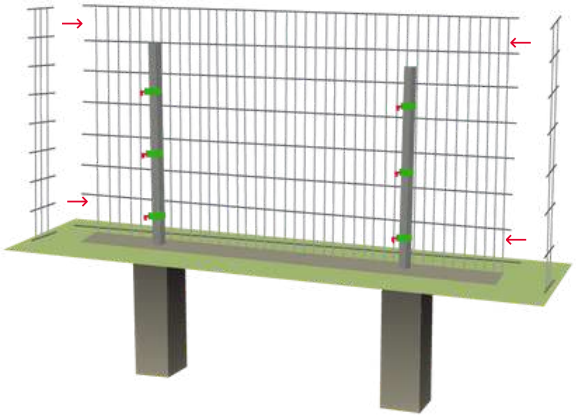
The rear fence panel rests its bottom edge on the base and is fastened to the post using spacer strips.



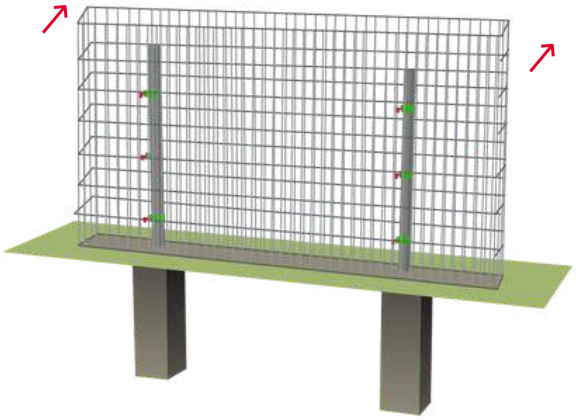


Side walls are installed on both sides, connected using M6 screws and nuts.



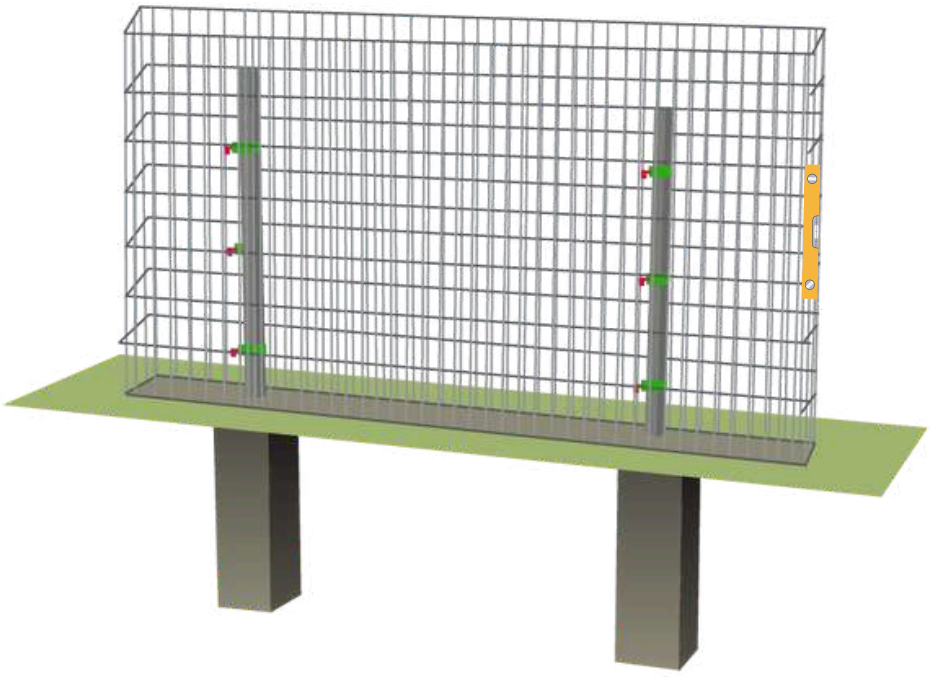


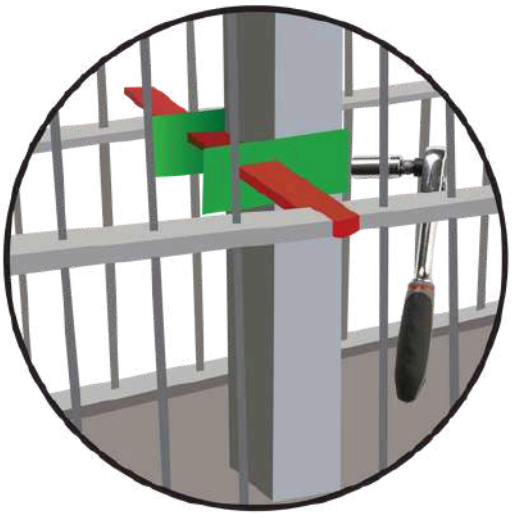
Next, the front fence panel is installed and screwed to the side walls.

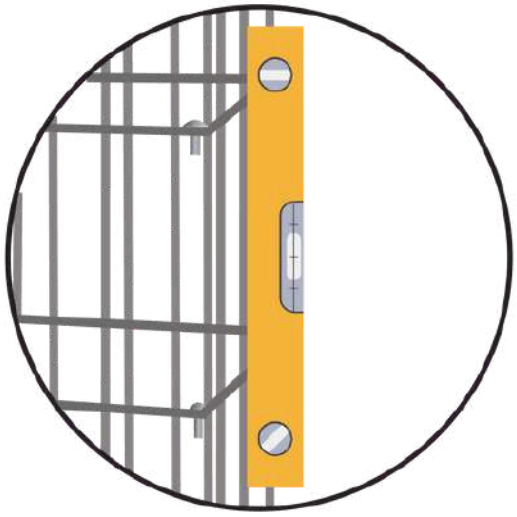


FENCE ALIGNMENT

To align the gabion fence, the M6 screws in the brackets are loosened, allowing adjustment of the spacer strips. The structure is leveled using a spirit level, after which the M6 screws are tightened, setting the final shape of the fence.

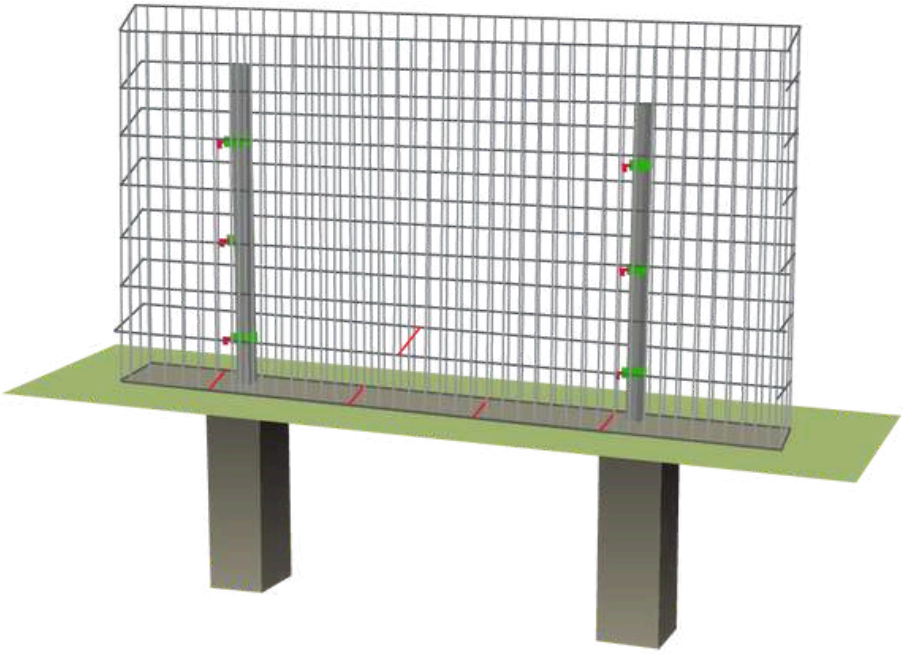


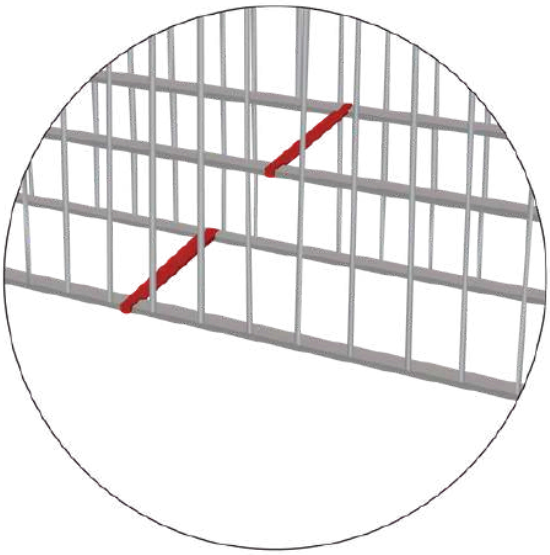




INSTALLATION OF DIVIDERS

After leveling and securing the gabion fence, the dividers are installed using a plastic or rubber mallet to avoid damaging the zinc coating.
The dividers are installed gradually — every 2 rows — which are then filled with stone. This process is repeated until the fence is fully filled.
The appropriate number of dividers must be used and the recommended spacing maintained in accordance with the instructions (see p. 10), ensuring a straight and aesthetically pleasing fence line.





FENCE FILLING PROCEDURE WITH AGGREGATES

After securely fastening the strips and hooks in the first two rows, aggregate is poured to this height using a bucket. The process is repeated layer by layer until the fence is completely filled. For an aesthetic effect, it is recommended to arrange and rotate the stones by hand on the visible side so that they do not protrude beyond the fence.

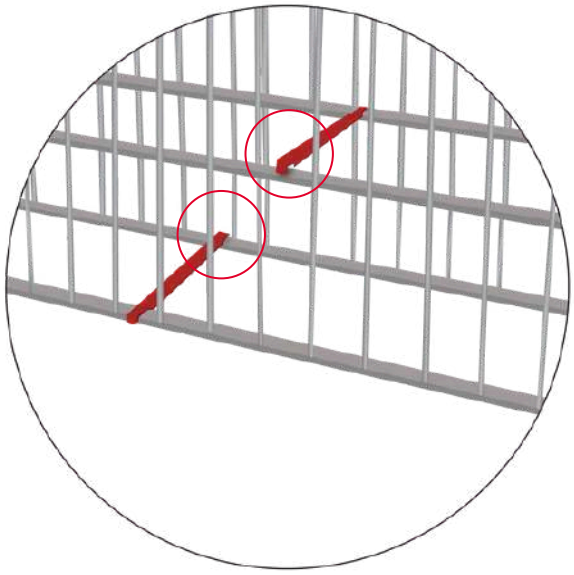
CORRECT PLACEMENT OF DIVIDERS

Fence Height (cm)	Fence Length (cm)	Installation on the Post	Dividers	Spacer Rails	Post Height (cm)
60	250	2	12	2	110/30
80	250	4	14	4	130/50
100	250	4	17	4	150/70
120	250	4	21	4	170/90
140	250	4	24	4	190/110
160	250	6	26	6	210/130
180	250	6	29	6	230/150
200	250	6	33	6	250/170

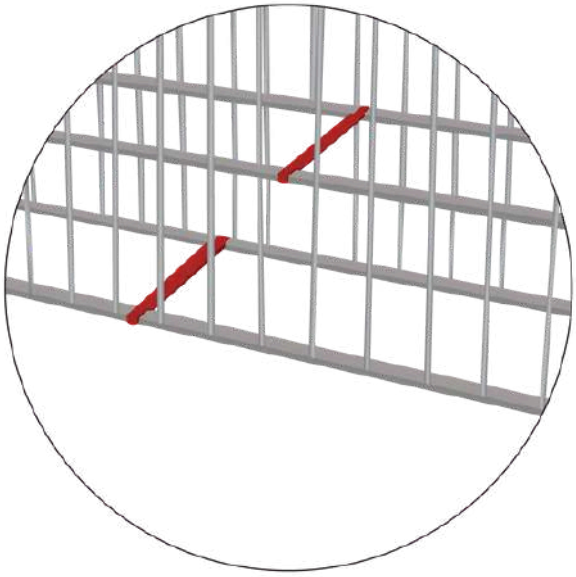
MISTAKES WHEN INSTALLING DIVIDERS

Note: While pouring the stones, the dividers may become dislodged due to impacts. Their position should be checked continuously during filling.

INCORRECT POSITIONING OF DIVIDERS

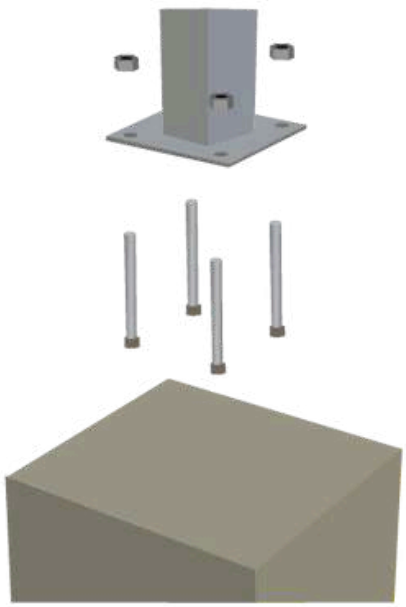


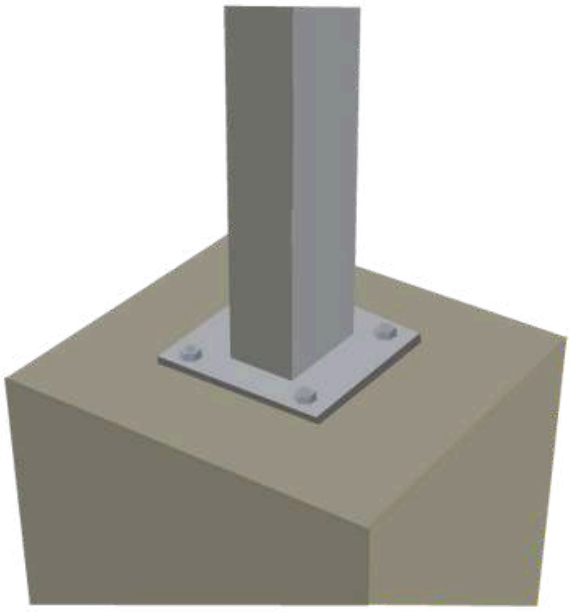
CORRECT POSITIONING OF DIVIDERS



PROCEDURE FOR INSTALLING POSTS ON A SLAB

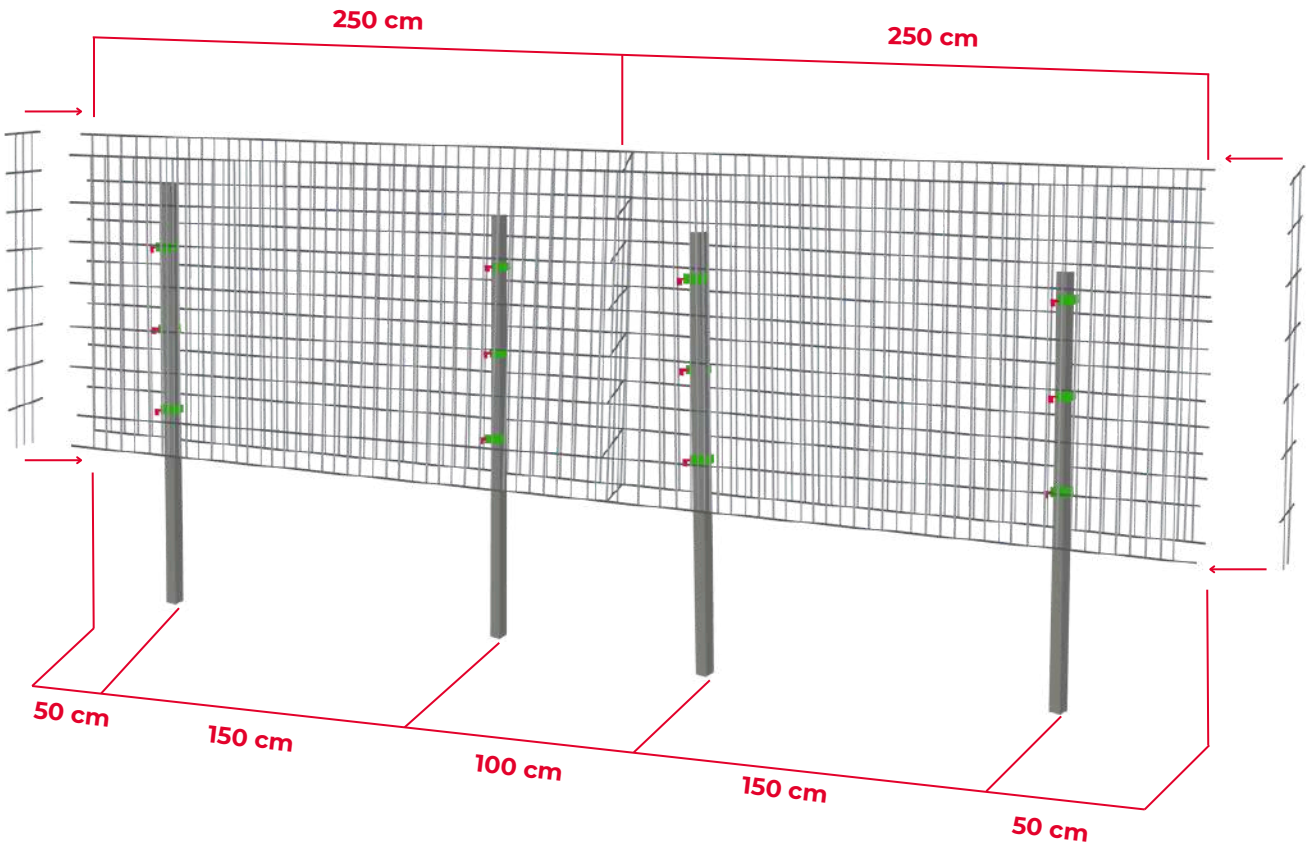
In the case of an existing concrete foundation, when it is not possible to set the posts in the ground, installation on a steel base plate is used. For fences up to 160 cm in height, mechanical anchoring (steel anchors) is allowed, while for heights of 180–200 cm, chemical anchors are recommended. When installing on a plate, the post with a welded base plate is supplied as part of the set.





INSTALLATION OF GABION STRUCTURES LONGER THAN 250 CM

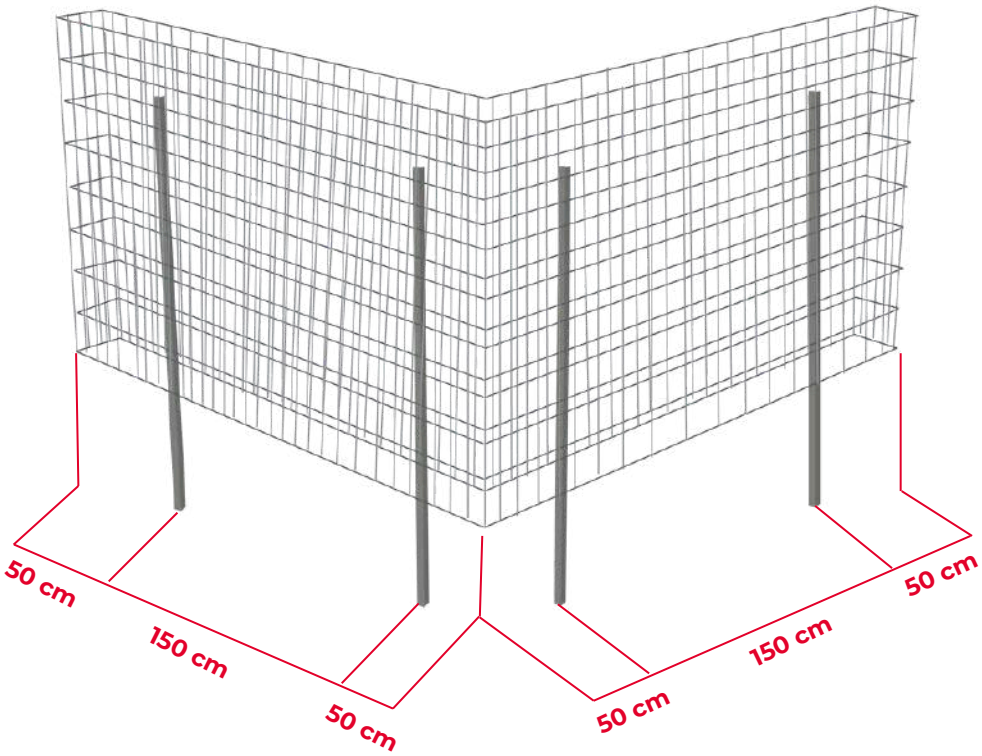
When installing a through-type fence structure longer than 250 cm, only the front and rear panels are used. Side walls are installed only at the beginning and at the end, enclosing the entire structure. The installation procedure follows the instructions for a 250 cm long fence.



In this connection, the side wall has been replaced with dividers, which should be positioned according to the diagram.

INSTALLATION OF THE CORNER SECTION OF THE FENCE

When installing the corner section of a gabion fence, special attention should be paid to the correct connection of elements within the corner.



MOST COMMON INSTALLATION ERRORS AND RECOMMENDATIONS

1. Ground Preparation

A common mistake is an inadequately leveled and compacted base, which can cause the fence to deviate from its axis or become deformed.

Posts should be concreted at least 30 cm below the top edge of the fence to allow for stone filling.

The recommended distance between the post and the side panel is 40–50 cm — placing it too close prevents proper filling.

Using a plastic post cover is recommended — it provides protection and aesthetic value, shields against precipitation, and minimizes the risk of frost expansion.

When using chemical anchors, holes must be thoroughly cleaned (blown out) of dust and debris after drilling.

2. Post Embedding Depth

Posts must be set below the frost line — at least 80 cm below ground level. Shallower installation may cause settling or tilting of the fence.

3. Installation of Posts and Panels

Insufficient tightening of M6 screws (connecting the panels) can result in structural deformation, especially during stone filling.

It is recommended to retighten all screws after the fence has been filled with stones.

4. Filling — Material Selection

Gabions should be filled with clean, crushed stone, free from sand, mud, or clay. Contaminants washed out by rain can cause deformation.

Stone that is too fine may fall through the mesh openings. The recommended fraction is at least 63–125 mm.

5. Filling the Fence

When filling the fence, care should be taken not to damage the surface.

Stones should be poured gradually and directly — preferably with a bucket, with optional manual arrangement on the visible side.