



## Assembly instructions for ROKO gabions

These assembly instructions apply only for ROKO gabions  
made by Rothfuss Best Gabion GmbH & Co. KG

Please read these instructions once completely before beginning with the individual steps.

### General Note

Required Experience for the construction of gabions have to be the following conditions:

- Safe handling of tools and machines as well as with ladder and scaffold
- Knowledge in the field of accident prevention, work safety and operational safety
- Experience in the field of transportation and use with heavy and bulky components

If the above mentioned required experience is nonexistent or in case of uncertainty, please contact an expert or instruct a specialist company.

### Safety Rules

- Set up gabions only on a load-bearing, level surface in accordance with the assembly instruction
- Protective equipment such as protective gloves and safety boots must be worn during all work
- CAUTION! Wire could be sharp and sharp-edged!
- CAUTION! Risk of falling during work.
- Risks have to be assessed and corresponding protections to be taken.

For the assembly of gabions you also need wooden beams or ladders as filling aids which are not included.



Manufacture a load-bearing, level surface in accordance with structural requirements.

In order to avoid bending of the **ROKO** baskets, the bottom grids must be on uniformly load-bearing ground that has been manufactured according to static requirements.

Note: When manufacturing the subgrade please observe the wall inclination angle

Components of **ROKO** gabions:

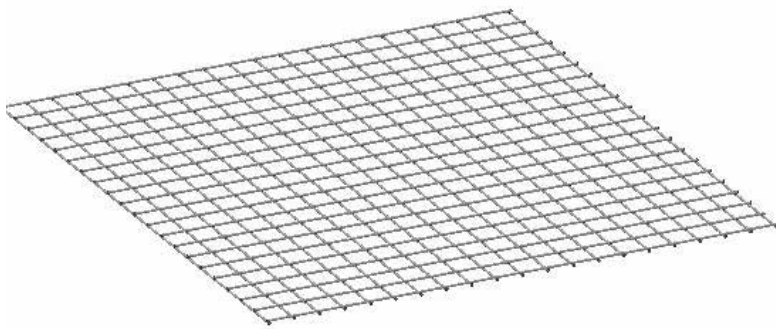


Figure: **ROKO** grid



Figure: Helical rod to connect **ROKO** grids

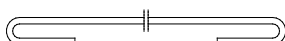
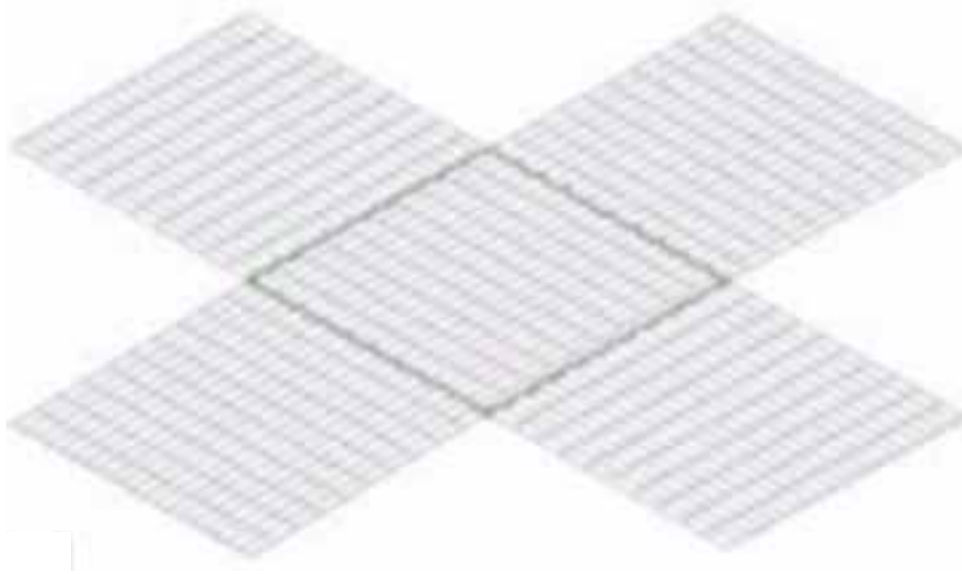


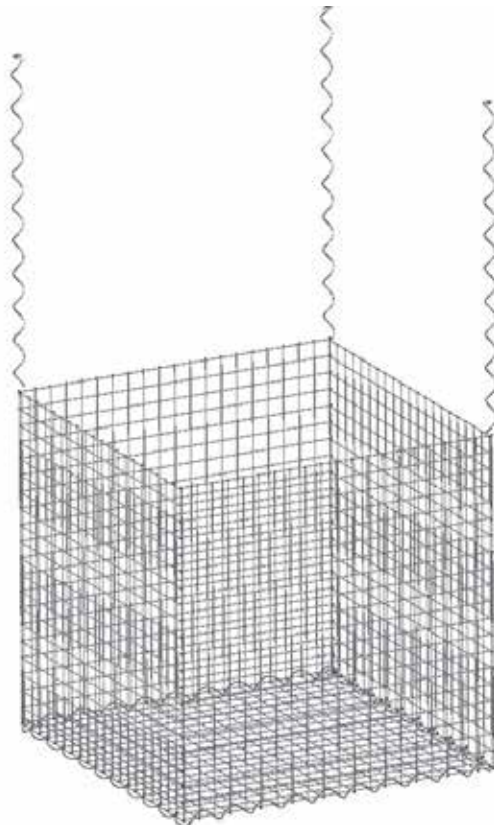
Figure: Staying rod for stiffening of **ROKO** basket

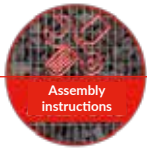


1. Lay down **ROKO** bottom and side grids in the shape of a star and connect them with the helical rods.



2. Lift-up **ROKO** side grids in position, and thread in helical rods from above.





### 3. Put in staying rods.

**Attention:** Staying rods must always be fitted diagonally across a mesh crossing. Bend the stay rods with a pliers.

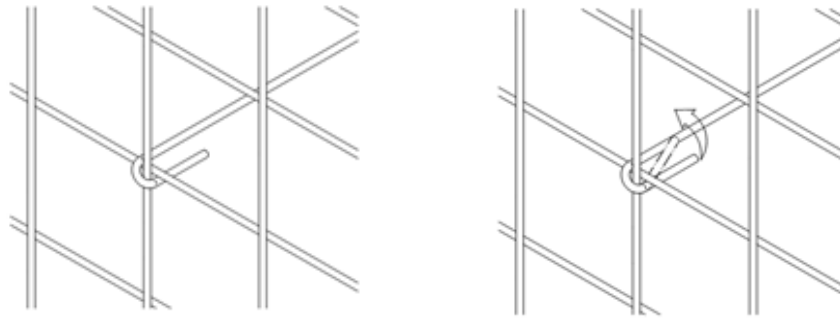
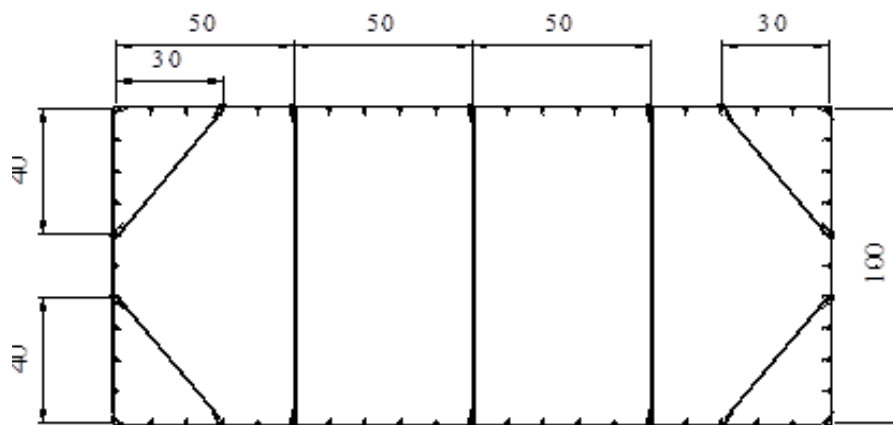


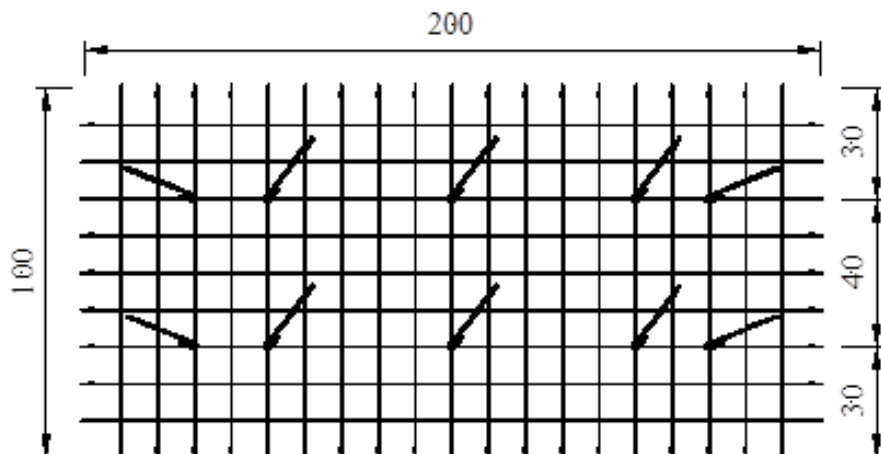
Figure: Correctly fitted and bended staying rods

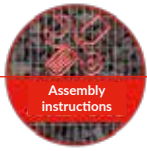
**Attention:** Staying rods are not only to be seen as mounting aid! They also have a static function. Please be sure of correct fitting!

#### Plan View



#### Side View





4. Fill the **ROKO** gabions with sufficiently strong frost and weather resistant stone materials, filling to ensure as few cavities as possible.



The grain size at the front-layer has to be bigger than the mesh size. For the rest filling gravel material - with a grain size bigger than the gap of the front-layer - can be chosen.

The complete stone filling has to be tightly packed without voids - all corners and edges have to be completely filled.

When filling the baskets please ensure that the staying rods do not deform, and that the basket do not bulge caused by deformed staying rods.

Please ensure that the filling underneath the staying rods (especially at edges and corners) is tightly packed without voids to avoid deforming of the staying rods which otherwise could be caused by the filling above the staying rod.

**If staying rods have been deformed they must be immediately corrected and straightly reformed.**

Please ensure that the stones are filled precisely to the upper horizontal edges and that there are no voids between the filling and the lid. If there are voids or cavities, the load of the grid on top will not be transferred in a force-locking manner via the stone filling, but will put pressure on the wire basket below causing deformation. This too can lead to structural stability problems.



5. Close the gabions with lid and helical rods.



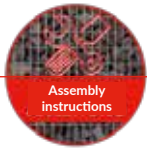
**Advice:**

The table **Roko** component parts makes it possible to calculate the components needed for the assembly of a gabion.

**ROKO**  
Component parts

basket (cm) length x width x height	grid sizes (cm)								helical wire-4,5 mm			staying rods wire--Ø 5,0 mm	
	200 x 100	200 x 50	150 x 100	150 x 50	100 x 100	100 x 50	50 x 100	50 x 50	150	100	50	1015	515
200 x 100 x 100	4				2					16		6	8
200 x 100 x 050	2	2				2				12	4	3	4
200 x 050 x 100	2	2					2			12	4		14
200 x 050 x 050		4						2		8	8		7
150 x 100 x 100			4		2				4	8		4	8
150 x 100 x 050			2	2		2			4	4	4	2	4
150 x 050 x 100			2	2			2		4	4	4		12
150 x 050 x 050				4				2	4		8		6
100 x 100 x 100					6					12			8
100 x 100 x 050					2	4				8	4		4
100 x 050 x 100					2	2	2			8	4		8
100 x 050 x 050						4		2		4	8		4
050 x 050 x 050							6				12		2

For a monolithic construction, please refer to the technical documentation « Material savings »



## Advice: Filling aids

In order to avoid bulging when filling the **ROKO** gabion baskets, various simple aids can be utilized.

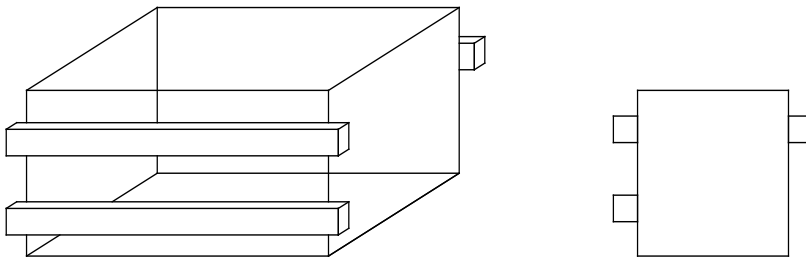


Figure: wooden beams

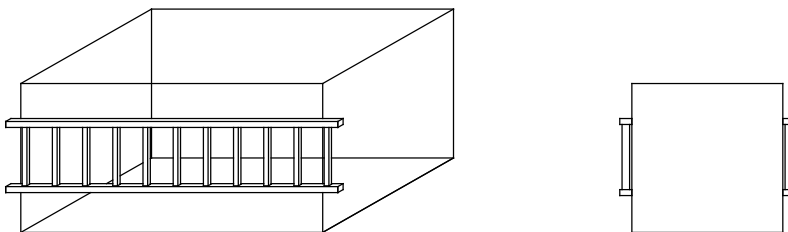


Figure: ladders

These are bound to the vertical **ROKO** screens and removed again after filling. If you use non-galvanized binding wire, please ensure this is removed as soon as possible after filling as this rusts and may leave unsightly rust marks on the galvanized screen grills. However, as this is only a surface deposit it does not damage the corrosion protection of the screen grills.





## Rothfuss Best Gabion GmbH&Co.KG

Dr.-Oetker-Straße 30  
54516 Wittlich

Tel. +49 (0) 65 71 / 95 233 - 0

Fax +49 (0) 65 71 / 95 233 - 55

eMail: kontakt@rbg.eu

### Disclaimer

Our assembly instructions in word and picture are provided best of our knowledge and belief. It does not relieve the user/contractor of the responsibility to examine the supplied products for their suitability of the intended procedures and purposes.

Application, use and processing of the products are beyond our control and are therefore exclusively in the area of responsibility of the user/contractor.

[www.rothfuss-bestgabion.de](http://www.rothfuss-bestgabion.de)



**From departure to arrival.  
Let's pilot your projects together!**

