

River mattress

Product Description

River mattress stone boxes with a special form, in large expansion and flat shape. They consist out of hexagonal, multiple shielded steel wire thick galvanized with a mesh size of 60× 80 mm and a diameter of 2.0 mm. The base element is a continuous metal net and a mechanically fixed partition per meter. Throughout a multicellular box arises. The partition strengthens the structure and makes the assembly easier.

The lid consists of the equally metal net as the basement, but is manufactured and supplied separately. As well as the stone boxes the base element and the lid are provided with a thick selvedge wire. With this the edge is strengthened and the assembly is made easier. For larger buildings it is possible to use a metal net in castors for closing the boxes.

Application

One big advantage of the river mattresses is their flexibility. The hexagonal metal net facilitates the structure a high flexibility in all directions without breaking. It is a very important feature for buildings on or in water. Here the foundation is often less stable and there can be a high strain to the structure. All forces which emerge from pressure, thrust and tension effect on the stone-filled boxes made of hexagonal wire nets. River mattresses are mostly used at river of shores as well as below and above the mid waterline, Overflowing dike tops and also taper bridge abutment and supply lines below the river bed, river mattresses offer protection at different places.

Economical efficiency

- Structure made of river mattresses are economical and ecological for the following reasons:
- Low maintenance
- Simple assembly and filling, no need for qualified labour
- Filling is available in direct proximity
- Foundation work not necessary, only a plane surface on a sustainable ground is needed
- River mattresses support the natural bank vegetation and integrates naturally in the surrounding landscape
- The voids between the stones provide habitats for small creatures

Measurement

Measurements(m)		Mesh type 6×8 cm		
Length	Width	Thickness(Height)	Thickness(Height)	
3.0	2.0	0.17	Thick-galvanized or Galfan-coated Ø 2.0 mm	Galfan & synthetic Coating
4.0	2.0	0.23		Ø int.2.2 mm
5.0	2.0	0.30		Ø ext.3.2 mm
6.0	2.0			

Tender specification

Supply and assembly of river mattresses. Box consists of hexagonal wire netting multiple mechanically shielded steel wires with edge reinforcement and with partition for subdivision in chambers of 1.0 m. Side walls, partition and lid have to be linked with each other in mesh distance as according to the manufacturer's data.

Material: Mesh size 6×8 cm, wire thickness 2.2 mm, mesh course vertically, all parts thick galvanized minimum 275 g/m^2 , tensile strength minimum 430 L/mm^2 . Corrosion resistance according to ISO 9227 minimum 1.500 hrs salt spray test.