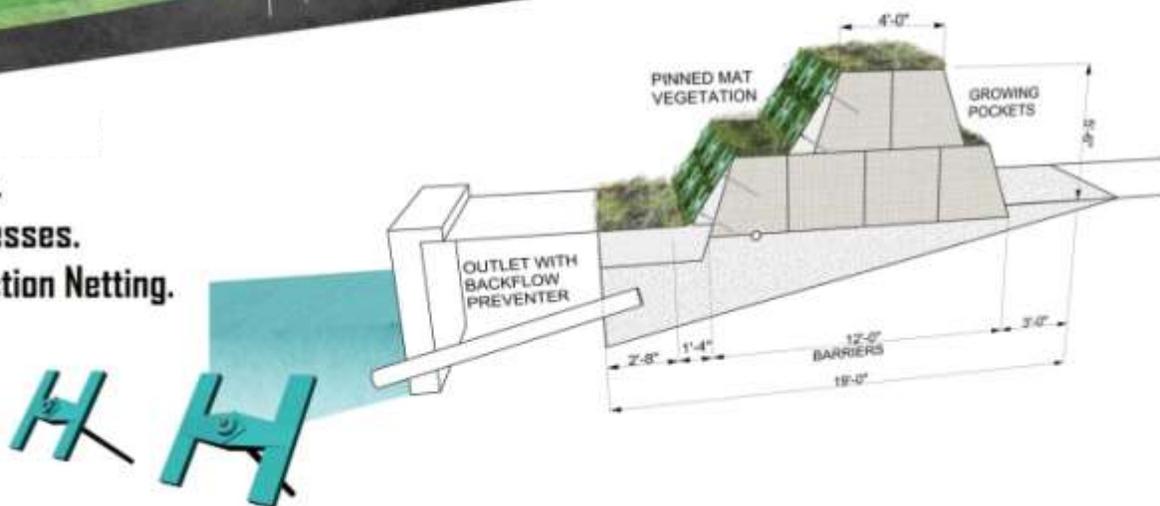


YORN WIRE STEEL CO., LTD



Gabion - Boxes.
Gabion - Mattresses.
Rockfall Protection Netting.
Sack Gabions.





About Us

Yorn Wire Steel co., Ltd is a certified company and specialized importer of gabion baskets, gabion walls, gabion cages, gabion fencing and custom made hexagonal steel mesh system. All of our products are basing on strong and heavy galvanized mesh. Our wide products range is multi-purpose and used in building industry, fencing, garden design, street architecture and construction. We deliver standard and bespoke gabion baskets solution.



What are Gabions?

The term gabion refers to a modular containment system that enables rock, stone or other inert materials to be used as a construction material.

The modules or cages as they are known, are formed of wire mesh fabric panels, jointed to form square, rectangular or trapezoidal shaped units. These units are part pre-assembled in the factory to form a flat pack system.

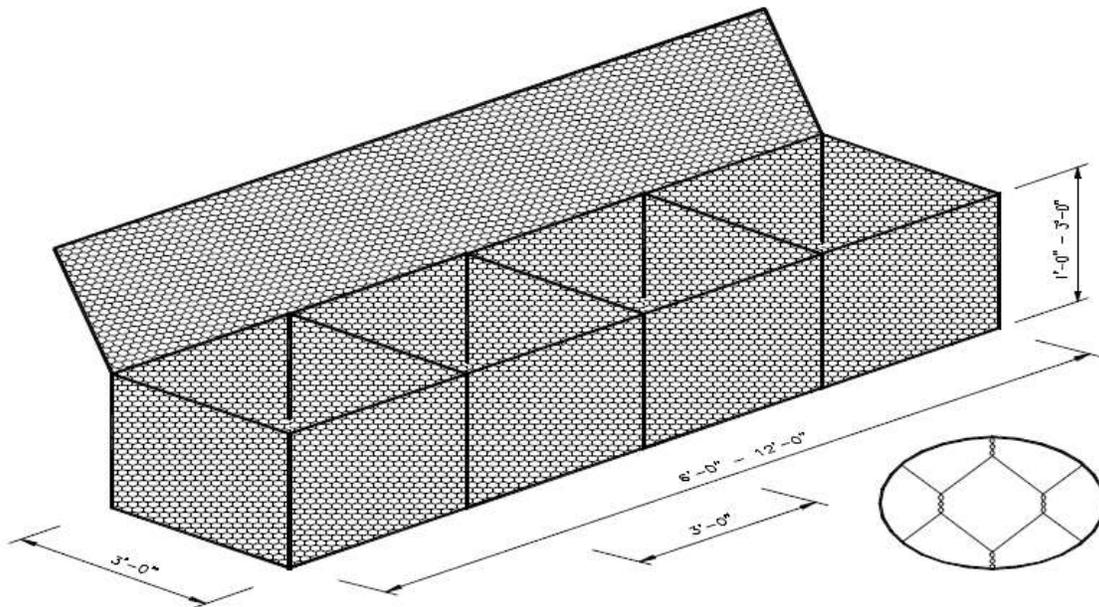
These flat pack units are then supplied to the customer and formed into the final shaped module on site with the necessary lacing wire, helicals and / or rings as required. Each module has to be connected to adjacent modules to form a monolithic structure.

The types of mesh used, must be of a non ravelling type such as welded wire mesh or hexagonal woven wire mesh and provided with corrosion protection to suit the required exposure conditions.

The gabions are normally machine filled in layers with the contractor picking the stone over by hand to reduce excessive voids. The exposed faces are also systematically hand packed to provide an appearance of a dry stone wall.

Although some structures are only machine filled, this procedure is not normally recommended.

For gabion structures to perform correctly the quality of installation is of paramount importance.



Gabion – Box

Our products:

1. Gabions and River/Reno Mattresses are made from hexagonal woven steel wire mesh material
2. Rockfall Protection Netting
3. Sack Gabions



Minimum Strength Requirements For Gabions:

<i>Test Description</i>	<i>Galvanized/Galfan Gabions</i>	<i>PVC Coated Gabions</i>
Tensile strength of mesh parallel to wire twist:	3500 lbs/ft	2900 lbs/ft
Tensile strength of mesh perpendicular to wire twist:	1800 lbs/ft	1400 lbs/ft
Connection to selvedge:	1400 lbs/ft	1200 lbs/ft
Panel to panel:	1400 lbs/ft	1200 lbs/ft
Punch strength of mesh:	6000 lbs/ft	5300 lbs/ft



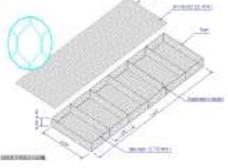
River willow woven Gabions were first used by soldiers in previous centuries for fortification of their barracks and cylindrical Gabions(with rocks) were rolled down the slope at the approaching enemy during war times. The modern square/rectangular Gabion is now used predominantly in the Civil Engineering and Mining Industries for retaining walls and for river structures to reduce water flows and prevent soil erosion. We offer further knowledge and expertise related to these products and their many solutions for private clients, civil engineering contractors and consultants alike.

We offer you up-to-date information in this exciting field, presented in a simple yet effective way,enhancing your project purchase and design experience. We have years of experience in the design and supply of Gabions and River Mattress products, installations and solutions in the marketplace. We assure you of our best intensions at all times and look forward to hearing from you.

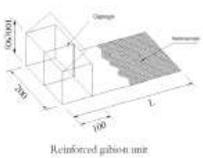


Gabion Box	LxWxH (m)	Mesh Opening (cm)	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)	Square meter	Wire Material	Plastics Coated	Standard
	2x1x0.5	10x12	1.80-2.8	2.5-3.2	2.2-3.0	7.5	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
	2x1x1	10x12	1.80-2.8	2.5-3.2	2.2-3.0	11	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
	3x1x1	10x12	1.80-2.8	2.5-3.2	2.2-3.0	16	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
			2.7-4.0	3.0-5.0					
	4x1x1	10x12	1.80-2.8	2.5-3.2	2.2-3.0	21	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
			2.7-4.0	3.0-5.0					
	1.5x1x1	10x12	1.80-2.8	2.5-3.2	2.2-3.0	8	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
Tolerances: Height, Width: ±5%; Length: ±10%. other Size: 3x1x0.5m; 4x1x0.5m; 2x1x0.3m etc. special specifications can be customized.									
Gabion Mattresses	LxWxH (m)	Mesh Opening (cm)	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)	Square meter	Wire Material	Plastics Coated	Standard
	4x2x0.3	10x12	1.80-2.8	2.5-3.2	2.2	21.4	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					

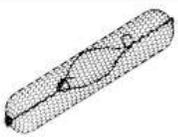


	6x2x0.3	10x12	1.80-2.8	2.5-3.2	2.2	31.8	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					

Tolerances: Height, Width: ±5%; Length: ±10%. other Size: 4x2x0.17m; 6x2x0.17m; 4x2x0.23m; 6x2x0.23m etc. special specifications can be customized.

Reinforced Gabions	LxWxH (m)	Mesh Opening (cm)	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)	Square meter	Wire Material	Plastics Coated	Standard
	2x4x1	10x12	1.80-2.8	2.5-3.2	2.2-2.7	15	Electro-galvanized Hot dip galvanized High galvanized 5% zinc aluminum alloy 10% zinc-aluminum alloy	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
			2.00-3.05	2.7-3.8					
			2.00-3.20	2.7-4.0					
			2.00-3.80	2.7-4.2					
			2.00-3.80	3.0-4.5					

Tolerances: Height, Width: ±5%; Length: ±10%

Sack Gabion	LxDiameter (m)	Mesh Opening (cm)	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)	Capacity (cm ³)	Wire Material	Plastics Coated	Standard
	1.8x0.6	10x12	1.80-2.8	2.5-3.2	2.2-3.0	0.54	Electro-galvanized	PVC or PE	BIS 16014:2012
	1.8x0.9		2.00-3.05	2.7-3.8		1.2	Hot dip galvanized		
	2x0.65		2.00-3.20	2.7-4.0		0.66	High galvanized		
	2x0.95		2.00-3.80	2.7-4.2		1.42	5% zinc aluminum alloy		
	2.7x0.6					0.8	10% zinc-aluminum alloy		
2.7x0.9				1.8					

Rockfall Netting	W x L (m)	Mesh Opening (cm)	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)	Square meter	Wire Material	Plastics Coated	Standard
	1 x 50	10x12	1.80-2.8	2.5-3.2	2.2-3.0	50	Electro-galvanized	PVC or PE	A975-11 A641/A641M A856/A856M BS EN 10223-2 BIS 16014:2012
	2 x 40		2.00-3.05	2.7-3.8		80	Hot dip galvanized		
	3 x 35		2.00-3.20	2.7-4.0		105	High galvanized		
	4 x 30		2.00-3.80	2.7-4.2		120	5% zinc aluminum alloy		
	4x30		3.0-4.0	4.0-4.8		120	10% zinc-aluminum alloy		



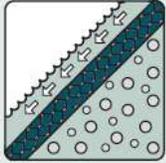
Advantages of Gabions

Proven Durability	Our Gabions and Reno Mattresses are supported with well documented research and certifications regarding the durability of the structures. The use of more advanced, durable wire and coating types provide reassurance that when selected appropriately, a 120-year design life can be achieved.
Design and Installation Support	Our Gabions and Reno Mattresses are supported by sophisticated design software and design assistance from our Geofabrics engineers. Conceptual drawings and pneumatic installation tools are also available to help ensure efficient and correct installation.
Environmentally Friendly	Gabions and Reno Mattresses become part of the environment in which they are placed, promoting rapid growth of natural vegetation.
Cost Effective	Gabions and Reno Mattresses compare favourably to traditional building materials and methods of construction, both with installed cost and whole-of-life costings.
Aesthetically Appealing	Correct installation and the right detailing of rock will create an impressive, eye catching feature.

Properties	Gabions	Reno ¹ Mattresses
Wire Diameter (mm)	2.7 (min)	2.0 (min)
Nominal Mesh Size (mm)	120 x 100	120 x 100
Selvedge Wire Diameter (mm)	3.4 (min)	2.4 (min)
Binding Wire Diameter (mm)	2.2 (min)	2.2 (min)
Galmac Coating (gsm)	275 (min)	245 (min)
PVC Coating (mm)	1mm (min) Grey	1mm (min) Grey
Rock Fill Size AS2758.4-2000	100mm (min) 250mm (max)	75mm (min) to $\frac{2}{3}$ the thickness of the mattress, or 250mm, whichever is the lesser

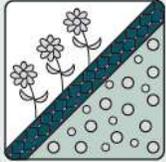


FUNCTIONS



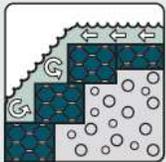
Drainage and erosion control

Gabions and Reno Mattresses structures can be designed to control the movement of water within an area and restrict the movement of soil from the site or localised area.



Environmental enhancement

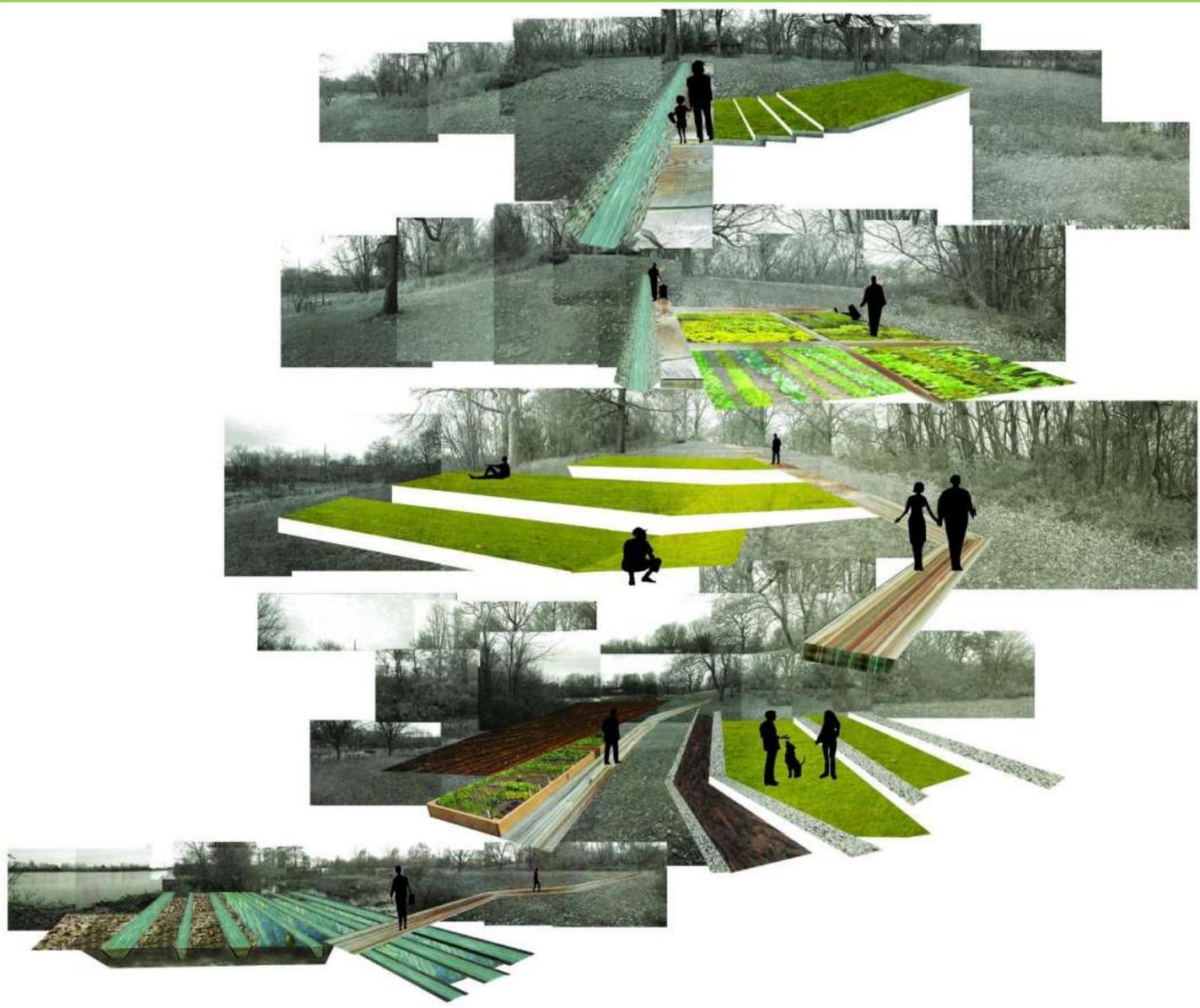
Gabions and Reno Mattresses structures are regularly designed to enhance the environment in which they exist. Such structures are either vegetated or designed to encourage entrapment of sediment and seed, contributing to the health and diversity of the natural environment.



Energy dissipation

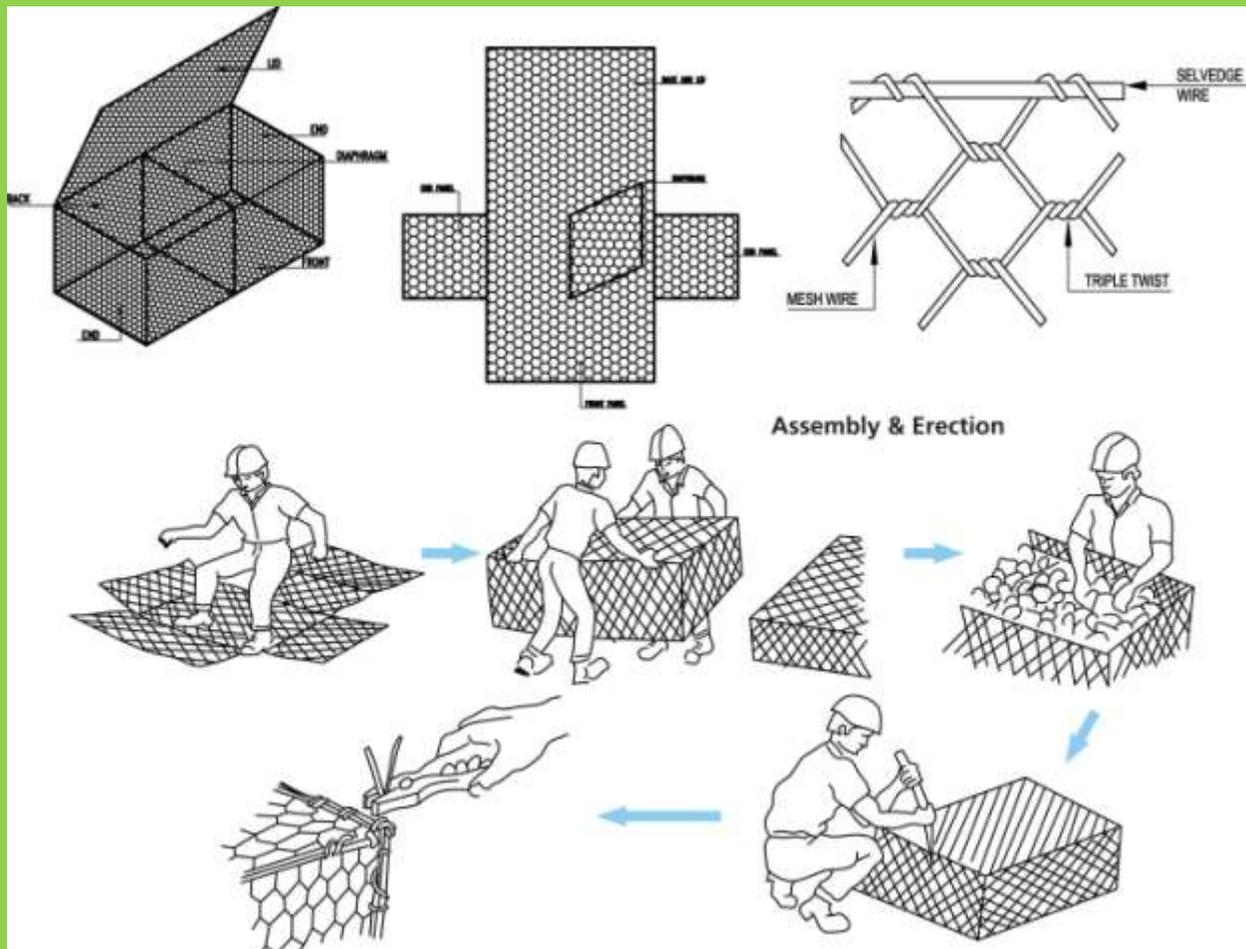
Gabions and Reno Mattresses structures can be designed to dissipate the energy of the water flowing through a specific area.

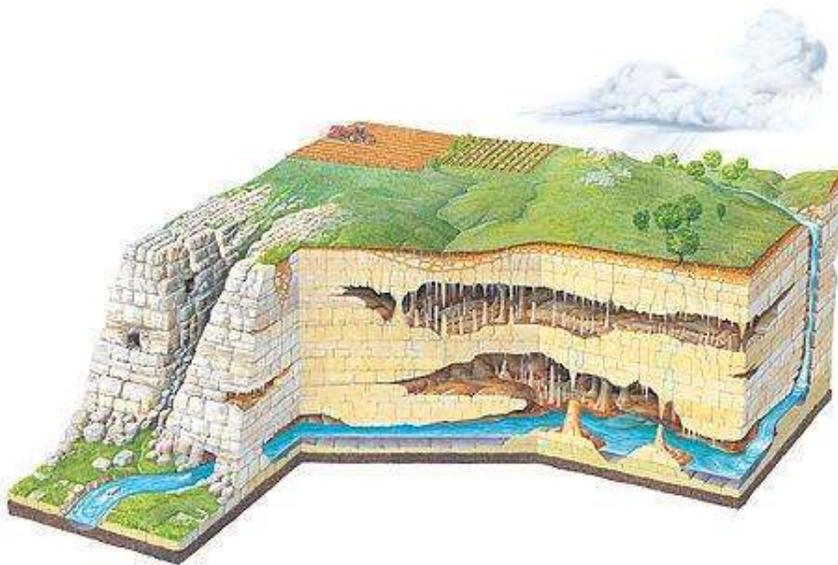




GABION-BOX WEIGHT CHART

ZINC PLUS PVC COATED	WEIGHT OF BOX (KG)	ZINC COATED	WEIGHT OF BOX (KG)
SIZE(1X1X1) IN MTRS	9.65	SIZE(1X1X1) IN MTRS	8.4
SIZE(1.5X1X1) IN MTRS	13.2	SIZE(1.5X1X1) IN MTRS	11.4
SIZE(2X1X1) IN MTRS	18	SIZE(2X1X1) IN MTRS	15.5
SIZE(3X1X1) IN MTRS	25	SIZE(3X1X1) IN MTRS	22.5
SIZE(4X1X1) IN MTRS	32.5	SIZE(4X1X1) IN MTRS	30
SIZE(4.5X1X1) IN MTRS	36	SIZE(4.5X1X1) IN MTRS	32
SIZE(6X1X1) IN MTRS	48	SIZE(6X1X1) IN MTRS	44
SIZE(6X1.2X1.2) IN MTRS	54	SIZE(6X1.2X1.2) IN MTRS	50
SIZE(3X1.2X1.2) IN MTRS	32	SIZE(3X1.2X1.2) IN MTRS	28
SIZE(6X1.5X1.5) IN MTRS	73	SIZE(6X1.5X1.5) IN MTRS	66.15
SIZE(3X1X0.5) IN MTRS	18.5	SIZE(3X1X0.5) IN MTRS	16
SIZE(6X1.5X0.5) IN MTRS	49	SIZE(6X1.5X0.5) IN MTRS	43
SIZE(5X1.5X1.5) IN MTRS	63	SIZE(5X1.5X1.5) IN MTRS	58
SIZE(4X1.5X1.5) IN MTRS	53	SIZE(4X1.5X1.5) IN MTRS	48
SIZE(3X1.5X1.5) IN MTRS	39	SIZE(3X1.5X1.5) IN MTRS	34
SIZE(2X1.5X1.5) IN MTRS	27	SIZE(2X1.5X1.5) IN MTRS	23.5





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