



Gabions & Reno Mattresses

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are rectangular baskets made of heavily galvanized, double twisted, steel woven wire mesh. The single unit constructed baskets are assembled, laced together and then filled with stone to form a monolithic structure. Gabions and Reno mattresses are used for retaining walls, sound barriers, channel linings, slope stabilization, dams and weirs. They are particularly effective in restoring the environment and promoting vegetation growth. Our mesh is also used very successfully for rockfall protection and mechanically stabilized soil walls (KINGCATS®). All the physical and mechanical properties of KINGCATS gabions and Reno mattresses meet or exceed the requirements of ASTM A975-97.



Main Features

ENVIRONMENTAL FRIENDLINESS—Gabions and Reno mattresses are environmentally friendly products. The blending of gabion and Reno mattress structures into the environment is rapid and pleasing. The voids in the rockfill become progressively filled with silt, promoting vegetation growth which is essential to the preservation and maintenance of the ecological balance of the surrounding environment.

FLEXIBILITY—The woven mesh system has the capability of withstanding unexpected and/or localized stresses due to ground settlements and scour by deflection while maintaining its structural integrity.

PERMEABILITY—The stone fill allows the water to seep through the structure while retaining the soil, therefore no additional drainage is required to relieve the hydrostatic pressures.

COST EFFECTIVE, EASY TO BUILD—Gabions and Reno mattresses construction does not require skilled labor because they are very easy to build. Standard construction equipment can be used. Structures can be built in stages, if necessary, and baskets can be prefilled and launched to enable the installation under water. Site assistance is available from any KINGCATS area office.

Due to their proven success, KINGCATS products are approved by many federal, state and local authorities.



L=Length ft (m)	W=Width ft (m)	H=Height ft (m)	# of cells
99 (30)	6 (1.9)	1 (0.3)	22
6.56 (2)	3.28 (1.0)	3.28 (1.0)	33
99 (30)	6 (1.9)	1.5 (0.45)	22
99 (30)	9 (2.8)	1.5 (0.45)	33
60 (19)*	6 (1.9)	1 (0.3)	14
60 (19)*	9 (2.8)	1 (0.3)	21
60 (19)*	6 (1.9)	1.5 (0.45)	14
60 (19)*	9 (2.8)	1.5 (0.45)	21

*With the addition of diaphragms, 3x3 cells are available upon request. All sizes and dimensions are nominal. Tolerances of $\pm 5\%$ of the width, length, and height, of the gabion mats shall be permitted.

Quantity Request

When requesting a quotation, please specify:

- number of units,
- size of units (length x width x height, see Fig.1),
- type of mesh,
- type of coating.

EXAMPLE: No. 100 gabion mats, 99x6x1, Mesh type 8x10, Wire diam. 0.106 in. (2.70 mm), Galfan+ PVC coated.

Type	D in. (mm)	Tolerance	Internal Wire Dia in. (mm)	External Wire Dia in. (mm)
8x10/ Galfan®+ PVC	3.25 (83)	$\pm 10\%$	0.106 (2.70)	0.146 (3.70)

	Lacing Wire	Mesh Wire	Selvedge Wire
Wire Diameter ϕ in. (mm)	0.094 (2.40)	0.118 (3.00)	0.153 (3.90)
Wire Tolerance (\pm) ϕ in. (mm)	0.004 (0.10)	0.004 (0.10)	0.004 (0.10)
Minimum Quantity/Galfan® oz/ft ² (g/m ²)	0.70 (214)	0.78 (222)	0.82 (230)
Wire + PVC Diameter in. (mm)	0.127 (3.20)	0.146 (3.70)	0.174 (4.40)

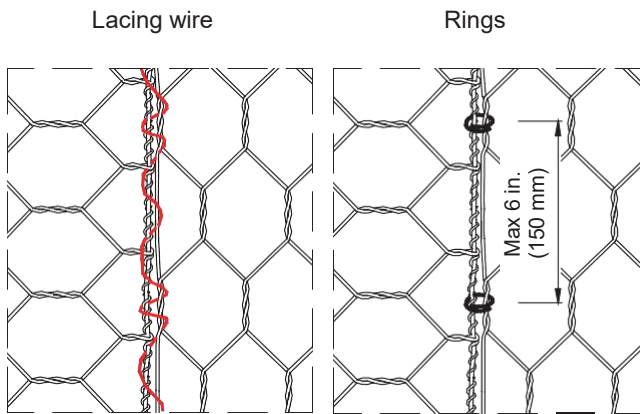


Figure 3

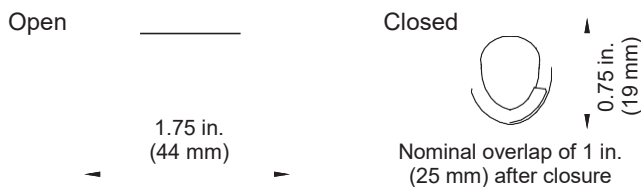
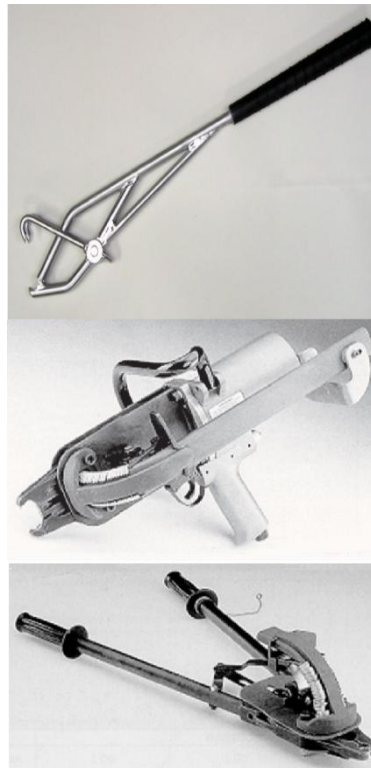


Figure 4



A Lid closer

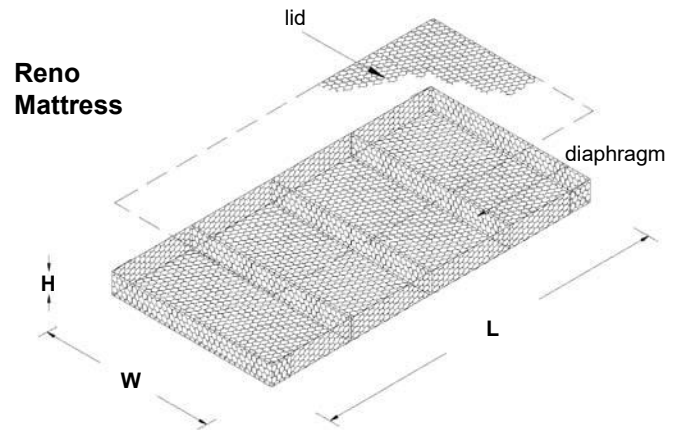
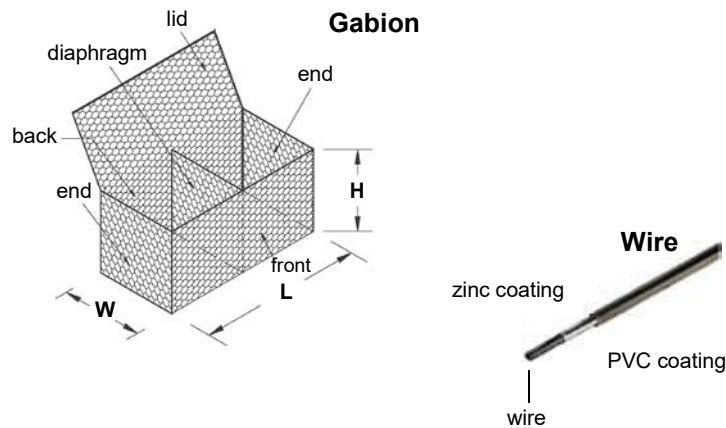
B Pneumatic Spenax tool

C Manual tool

GABIONS* (8 x 10 MESH TYPE)						
Letter Code	Length ft.	Width ft.	Height ft.	# of Cells	Capacity Yds ³	Color Code
A	6	3	3	2	2.0	Blue
B	9	3	3	3	3.0	White
C	12	3	3	4	4.0	Black
D	6	3	1.5	2	1.0	Red
E	9	3	1.5	3	1.5	Green
F	12	3	1.5	4	2.0	Yellow
G	6	3	1	2	0.66	Blu/Red
H	9	3	1	3	1.0	Blu/Yel
I	12	3	1	4	1.33	Blu/Grn
SP	4.5	3	3	1	1.5	Brown

RENO MATTRESSES* (6 X 8 MESH TYPE)							
Letter Code	Length ft.	Width ft.	Thickness in.	# of Cells	Area Yds ²	Capacity Yds ³	Color Code
Q	9	6	6	3	6	1.00	Whi/Yel
R	12	6	6	4	8	1.33	Whi/Grn
T	9	6	9	3	6	1.50	Red/Yel
U	12	6	9	4	8	2.00	Red/Grn
Z	20	3	7.8	5	35	3.12	Brown

- * All dimensions are nominal. Sizes and mechanical properties conform to ASTM A975-97.
- Available in zinc coated, Galfan coated, and zinc + PVC coated wire.
 - Metric sizes are also available. Please inquire about special sizes.



PVC COATED WIRE MESH—To extend the life span of a structure used in water, polluted or corrosive environments, gabions and Reno mattresses can be supplied with an additional gray and PVC (Polyvinyl Chloride) coating.

KINGCATS, INC. has been manufacturing gabion products for over 125 years. In addition to these products, KINGCATS offers a wide range of other materials for the soil erosion control market such as polyester geogrids, woven and nonwoven geotextiles and erosion control blankets. For all these products and their applications KINGCATS offers technical and design support, design software and jobsite assistance. Contact our nearest KINGCATS office for more information.

The information presented in this report is illustrative general information for comparative estimating purposes only. KINGCATS, Inc. assumes no responsibility for either the design or actual cost of any structures resulting from the use of information in this report. Anyone relying upon or making use of this information does so at his own risk and assumes any and all liability or other consequences resulting therefrom.

visit us at our website: www.kingcats-fence.com

FASTENING TOOLS—The ultimate alternative to hand lacing! Consider the use of pneumatic or hand fastening tools instead of lacing wire to expedite your construction operations. The hand lacing time for assembly and installation operations can be reduced up to 50% with the use of our fastening system. The rings can be either heavily galvanized or stainless steel. The latter is for use with PVC coated gabions.

Fastening Tool



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