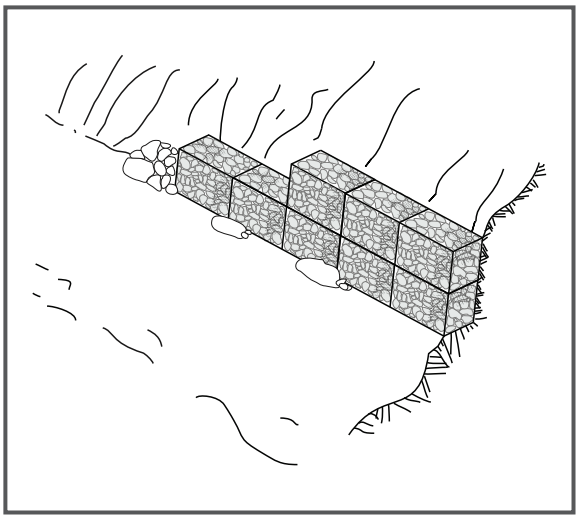
Bank erosion control system

Gabion Box - Data Sheet



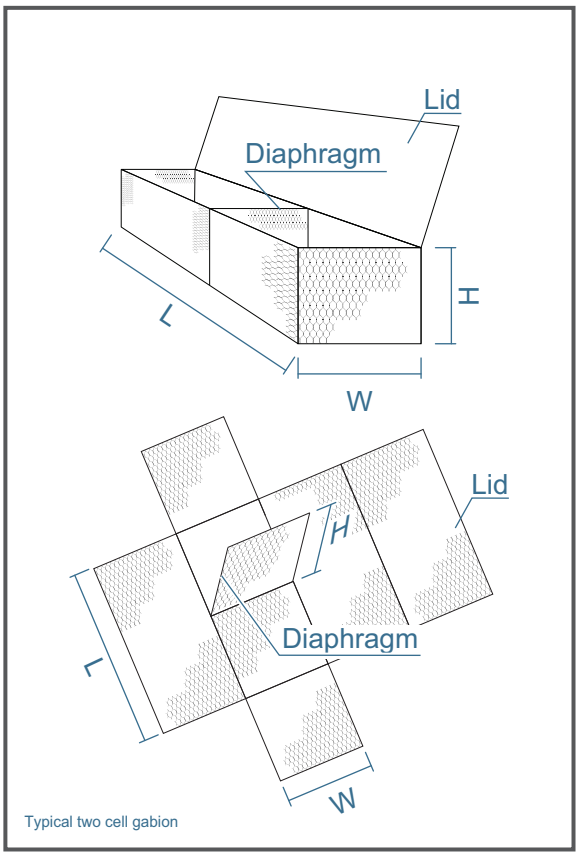
Area of Application:
TRUMER mesh gabion boxes were developed for river embankment protections to stabilize the banks of the river and prevent erosion. In civil engineering, these gabions are often used as mass gravity retaining walls for slope stabilization or to form terraces. In areas affected by natural disasters they are also used for protection. In addition, gabions are increasingly used for the purpose of noise reduction and/or simply as design elements.

Material:
TRUMER mesh gabions consist of galvanized or galvanized with PVC coated double twisted hexagonal woven mesh wire. All TRUMER gabion products (with or without diaphragms) are manufactured in accordance with the European Technical Approval.

Installation:
Different sizes of TRUMER mesh gabions consist of single boxes with or without diaphragms and one lid. Seams are made using either lacing wire or high-tensile steel ring fasteners.

Advantages:
Under most conditions, the gabions can be easily and quickly installed, thereby considerably reducing costs. Furthermore, corrosion protection is assured by a high-quality of metallic or PVC coating that increases the life and durability of the gabions.

Gabion Box Dimensions



Typical two cell gabion

Trumer Schutzbauten Canada Ltd. • 720 - 999 West Broadway • Vancouver, BC • Canada V5Z 1K5
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Gabion Mesh Characteristic *mm (in.)*

	Coating Type				
	Zn/Zn-Al Coated			Zn-Al + PVC Coated	
Mesh Type	8x10 [+/- 10 %]			8x10 [+/- 10 %]	
Nominal Mesh Size *D*	80 (3.15) [+/- 10 %]			80 (3.15) [+/- 10 %]	
Mesh Wire Diameter	2.7 (0.106)	3.05 (0.12)	3.9 (0.154)	2.7 (0.106)	3.05 (0.12)
Selvedge Wire Dia.	3.4 (0.134)	3.9 (0.154)	5.0 (0.197)	3.4 (0.134)	3.9 (0.154)
Lacing Wire Diameter	2.2 (0.087)			2.2 (0.087)	
PVC Thickness	N/A			0.5 (0.02)	
Ring Diameter	3.0 (0.118)			3.0 (0.118)	

Wire Properties

	Wire Diameter *mm (in.)*					
	2.2 (0.087)	2.7 (0.106)	3.05 (0.12)	3.4 (0.134)	3.9 (0.154)	5.0 (0.197)
Tensile Strength* *N/mm² (ksi)*	350 to 550 (50.7 to 79.8)					
Elongation* *%*	> 10					
Mass of Coating** *g/m² (oz/ft²)*	230 (0.75)	245 (0.80)	255 (0.84)	265 (0.87)	275 (0.90)	280 (0.92)
Tolerance*** *mm (in.)*	[+/-]0.06 (0.0024)		[+/-]0.07 (0.0028)			[+/-]0.08 (0.0031)
Tolerance PVC*** Thickness *mm (in.)*	[+/-]0.1 (0.0039)					N/A

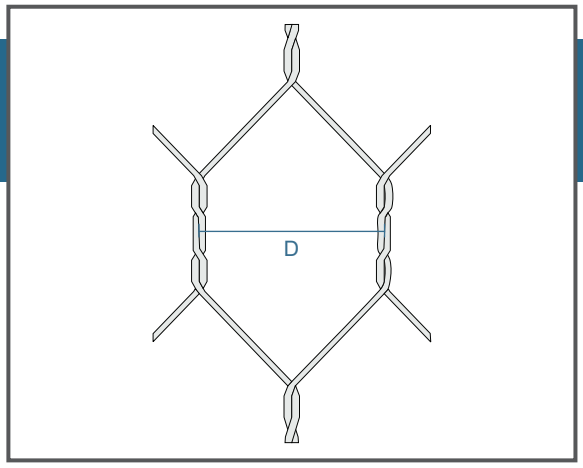
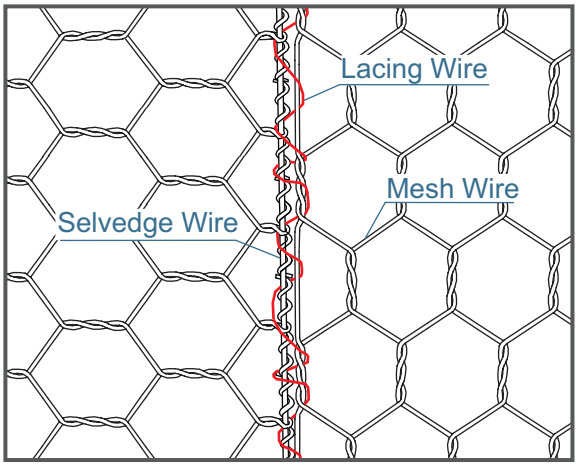
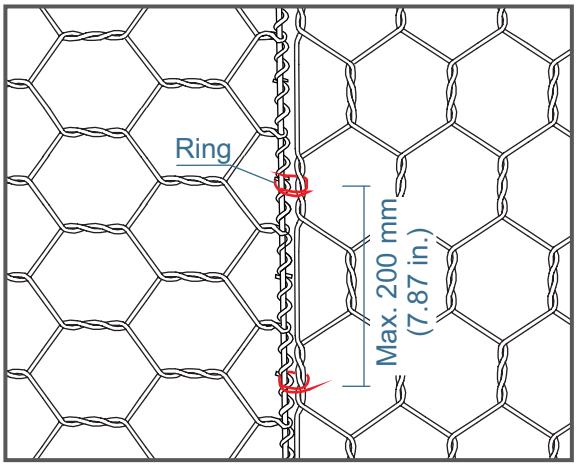
* in accordance with European Standard EN 10223-3
** minimum value in accordance with European Standard EN 10244-2, class A
*** in accordance with European Standard EN 10218-2

Gabion Sizing Options

Width *m (ft)*	Height *m (ft)*	Length *m (ft)*	Cells	Mesh Wire Dia. Zn/Zn-Al Coated *mm (in.)*	Mesh Wire Dia. Zn-Al + PVC Coated *mm (in.)*
1.0 (3.3)	0.5;1.0 (1.6;3.3)	1.0;1.5;2.0;3.0;4.0 (3.3;4.3;6.6;9.8;13.1)	1	2.7;3.05;3.9 (0.106;0.12;0.154)	3.7;4.05 (0.146;0.159)
1.0 (3.3)	0.5;1.0 (1.6;3.3)	2.0;3.0;4.0 (6.6;9.8;13.1)	2 - 4*		
2.0 (6.6)	0.5;1.0 (1.6;3.3)	3.0;4.0;5.0;6.0 (9.8;13.1;16.4;19;7)	2 - 4*		

Other dimensions are possible in accordance with project specific design requirements
* for every meter (3.28 ft) length one diaphragm

Mesh Dimension



Seam Connection