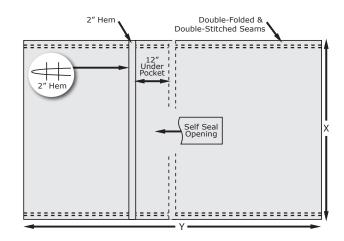


TECHNICAL DATA SHEET

IVI Self-Sealing Grout Bag

A proven construction system for erosion control, flood protection, and underwater repairs. IVI Grout Bags offer a proven protection system utilizing high strength geotextile bags as forms for casting grout (concrete) blocks in place, underwater or in-the-dry. IVI Grout Bags offer a unique and innovative process for construction and repair of bridge abutments, dikes, jetties, floodwalls, breakwaters and other sub-aqueous structures.

IVI Grout Bags are made of high strength water permeable fabric that allows excess water to bleed out increasing the "set" rate of the grout.



Fabric:	Carthage 6% - woven monofilament geotextile		
Construction:	Polyester webbing reinforced "J" seams		
	Seams are folded and doubled stitched with bonded polyester thread		
Self-closing Inlet Valve:	Remove the hose when the bag is full. The weight and pressure of the grout (or material) will push fill opening together and seal the bag.		
Stock sizes:	4'x10' , 4'x20' , 6'x10' , 6'x20' - with custom sizes available		

The IVI Self-Sealing Grout Bag fabric meets or exceeds the following specifications:

Physical Property	Test Method	Data	
Grab Tensile Strength	ASTM D-4632	370 x 250 lbs (1.65 x 1.11 kN)	
Grab Tensile Elongation	ASTM D-4632	15%	
Wide Width Tensile Strength	ASTM D-4595	225 x 145 lbs/in 2700 x 1740 lbs/ft	(39.41 x 25.40 kN/m)
Mullen Burst Strength	ASTM D-3786	450 psi (3100 kPa)	
Trapezoid Tear Strength	ASTM D-4533	100 x 60 lbs (0.45 x 0.27 kN)	
Puncture Strength	ASTM D-4833	120 lbs (0.53 kN)	
CBR Puncture	ASTM D-6241	950 lbs (4.23 kN)	
UV Resistance (@ 500 hrs)	ASTM D-4355	90% strength retained	
Permittivity	ASTM D-4491	.28 sec- ¹	
Flow Rate	ASTM D-4491	18 gal/min per sq ft (733 l/min per sq m)	
Percent Open Area	CW-22125	4-6%	
Apparent Opening Size	ASTM D-4751	70 US Sieve (0.212 mm)	

Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.

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The properties reported above are effective 08/01/10 and are subject to change without notice.