



*Tailored Solutions for
Erosion Control, Scour
Protection & Underwater
Construction & Repair.*

Fabriform

CONCRETE BAGS

The Challenge...

Waterfront structures pose unique challenges for design engineers, contractors and owners. Protection from strong current flow and wave action are a constant concern, while new construction and repairs are often difficult and costly. To ensure a stable shoreline in volatile environments, Construction Techniques, Inc. offers proven solutions through the use of Fabriform Concrete Bags.

The Solution...

Fabriform Concrete Bags offer an effective, adaptable and economical alternative to the expensive and labor-intensive placement of rip rap—heavy boulders, quarry stone or large precast concrete blocks. While rip rap must be placed with heavy cranes and often requires working from barges in waterfront environments, Fabriform Concrete Bags can be easily installed without the expense of heavy equipment or manpower.

Fabriform Concrete Bags allow customized design to ensure the most stable protection and repair of waterfront areas such as scoured bridge piers, dam spillways, bulk heads, dikes, jetties, flood walls, breakwaters and other sub-aqueous structures. Fabriform Concrete Bags are custom-ordered to specified form dimensions and placement criteria.



How it works...

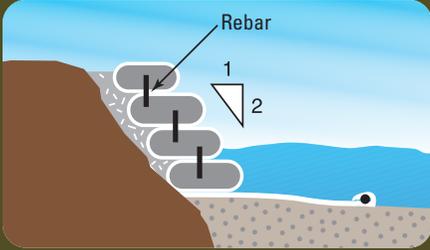
Fabriform Concrete Bags are used to create large, cast-in-place concrete blocks that provide superior shore protection with significantly reduced labor and equipment requirements. The fabric is high strength, 100% nylon fiber woven to create a water-permeable material that serves as both a filter and a form. A fine aggregate concrete mixture proportioned to provide a flowable mix is pumped into the Fabriform Concrete Bags through self-closing inlet valves designed to accommodate the concrete pumping hose nozzle.

Excess mix water is forced through the fabric as a result of pump pressure, causing rapid stiffening and case hardening of the outer area of the cast-in-place block. Reinforcing dowels can be inserted into the completed block to interlock with the next layer. The result is a strong, stable concrete block installation that will provide proven protection.

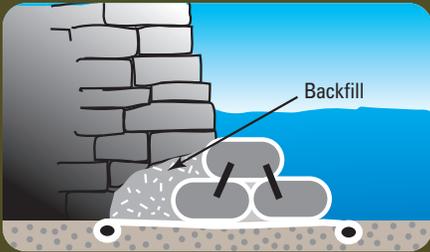


A MOST VERSATILE PROBLEM-SOLVING SYSTEM

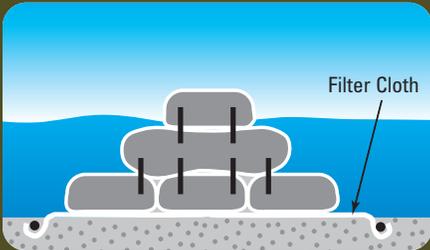
Shoreline Protection



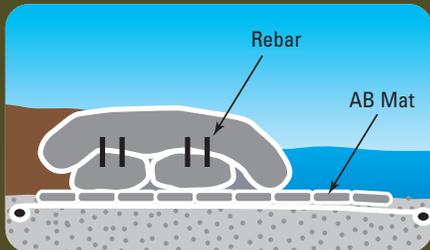
Structural Repairs



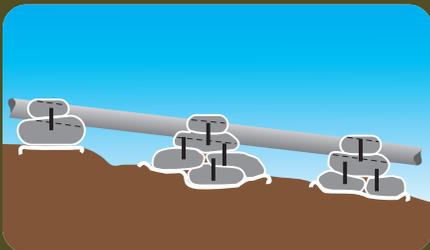
Groins



Breakwaters



Pipeline Saddles



Design and Ordering Information

Fabriform Concrete Bags are mill-assembled to order. All seams are folded and double-stitched to ensure integrity. The location and diameter of self-closing inlet valves (to accommodate the concrete pumping hose nozzle) is specified by the customer. Additional inlet valves can be provided at requested locations for large or irregular-shaped bags.

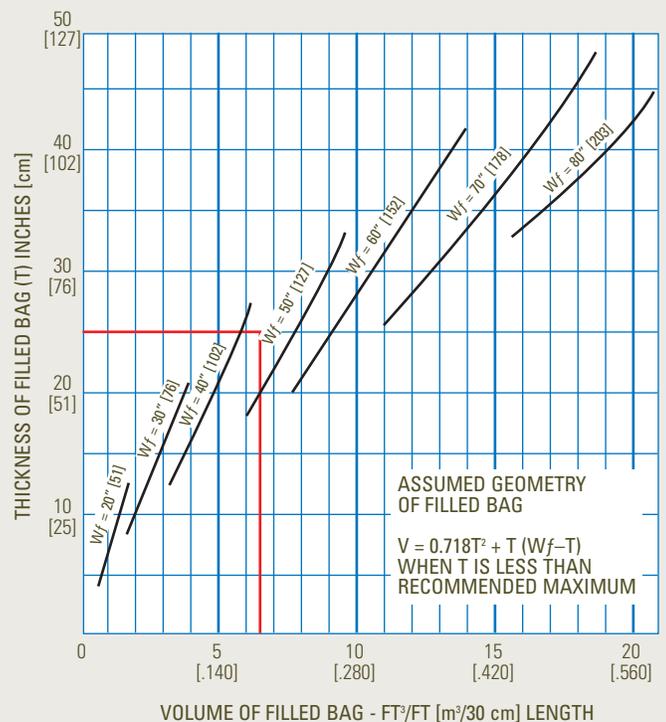
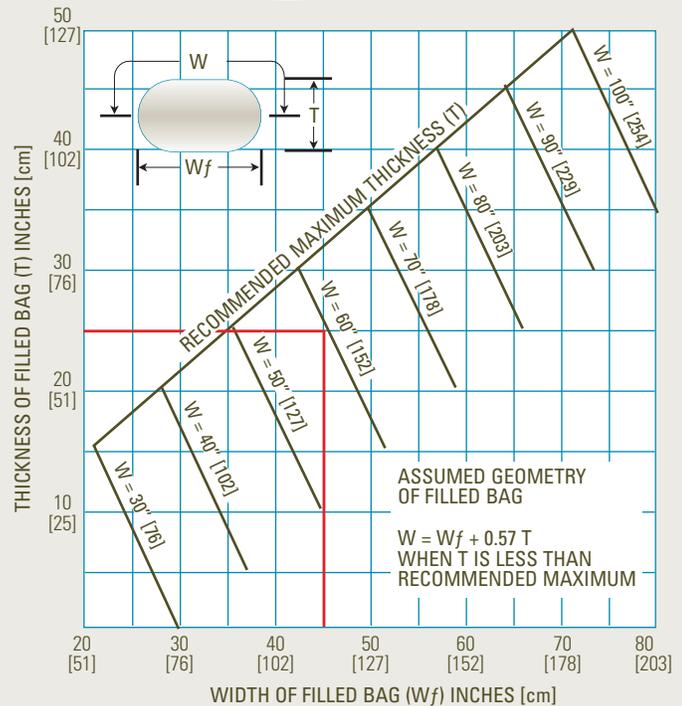
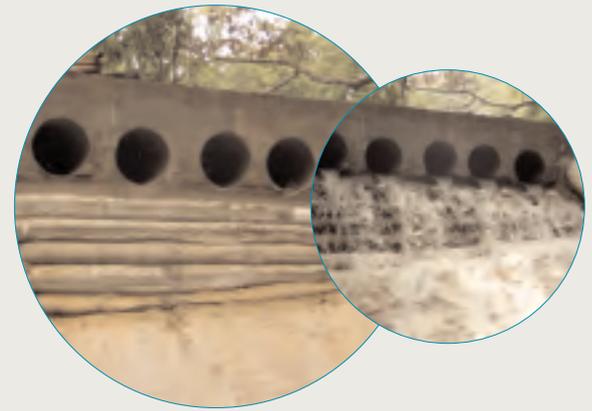
Complete guide specifications and installation procedures are available for Fabriform Concrete Bags. In addition, the experienced staff of Construction Techniques, Inc. can provide assistance in project specifications and ordering. Experts in the installation and manufacture of the Fabriform process, they work to ensure a final construction of superior quality and maximum value.

The graphs at right may be used as a guide in determining the quantity and size of bags, and the volume of mortar required for a specific project. The values are calculated only and do not reflect field conditions which must take into account some fabric stretch and contraction resulting from filling the bags with mortar. It is advisable to allow one foot of contraction in overall length for each bag.

EXAMPLE: Project requires filled bag dimension to be 10'-0" (305 cm) long by 45" (114 cm) wide by 25" (64 cm) thick.

From the top graph – for a filled width (Wf) of 45" (114 cm) thickness (T) of 25" (64 cm) and length of 10'-0" (305 cm), the customer would order a bag 60" (152 cm) wide by 11'-0" (335 cm) long.

From the bottom graph – the volume of a filled bag 45" wide (114 cm) (Wf), thickness (T) of 25" (64 cm) and length of 10'-0" (305 cm), would be approximately 6.5 cubic feet per lineal foot (.182 m³/30cm) requiring a total of 2.44 cubic yards (1.85 cubic meters) of mortar per bag.



Contact Information

With over 100 years of combined experience in the sale, manufacture and service of Fabriform products, the staff of Construction Techniques is well-prepared to advise you on your next project. Allow us to put our experience to work for you. For more information, contact us today or visit our website.

ADDRESS 15887 Snow Road, Suite 100
P.O. Box 42067
Cleveland, Ohio 44142, USA

TELEPHONE 216.267.7310 / 800.563.5047

FACSIMILE 216.267.9310

EMAIL bjakers@fabriform1.com

WEBSITE www.fabriform1.com

