



ENVIROMAT® FX
VEGETATED FABRIC-FORMED CONCRETE MATTRESS





**VEGETATED
CONCRETE
EROSION CONTROL
THAT KEEPS OUR
PLANET GREEN.**

Enviromat® FX (US and foreign patents pending) is the next generation of fabric-formed concrete mats: effective, economical, and ecologically sustainable. The mat's revolutionary open design allows for vegetation to grow.

The future of fabric-formed concrete is here—and it is green.



Cast-in-place installation during pumping of concrete



Results after 1 week



Results after 4 weeks



Results after 12 weeks



FEATURES

Enviromat® FX offers the cost advantages of fabric-formed concrete and the flexibility of a light-weight precast block system. Aside from that, FX offers the following benefits:

- Lightweight fabric formwork arrives to the site ready to pump
- Flexibility allows mat to adjust to surface irregularities and maintain positive subgrade interaction
- Easy to access and inexpensive to install
- Ability to cast in place or precast and hoist
- 30% open area for ample vegetation

APPLICATIONS

- Cast-in-place ditch or embankment lining
- Precast hoist-in-place ditch or embankment lining
- Lakeshore protection
- Marine Structures: FX replaces geotextile, stone filled mats and crushed aggregate, reducing overall project costs

Additional applications:

- Channel lining
- Culvert / outfall protection
- Detention pond lining
- Downchute protection
- Spillway protection



COMPETITIVE ADVANTAGE

FX VS. TIED CONCRETE BLOCK SYSTEMS

Unlike tied concrete block systems, Enviromat® FX relies on local batch plants for grout supply, reducing delivery costs.

FX VS. RIP RAP DITCH LINING

Rip rap is expensive, has a high carbon footprint, and requires more channel excavation due to revetment thickness requirements. FX provides equivalent or better performance at a lower cost and less environmental impact.



TWO INSTALLATION OPTIONS:

OPTION 1: CAST-IN-PLACE



OPTION 2: PRE-CAST AND HOIST





FX HYDRAULIC TESTING

- 20% Bed Slope
- 16.8 FPS Flow Velocity*
- >12 PSF Shear Stress*

*Test results for unvegetated mats per ASTM 6460.

SPECS

Size	Average Thickness		Mass Per Unit Area		Concrete Coverage		Open Vegetated Area
	in	mm	lb/ft ²	kg/m ²	ft ² /yd ³	m ² /m ³	
FX100	1	25	11	53.7	290	35.2	30
FX300	3	75	33	161.1	97	11.7	30

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