

Ercoform

The Ercoform™ Mats form cable-reinforced concrete block mattresses that resist erosive forces. The fabric form consists of a double layer woven fabric; joined together into a matrix of rectangular compartments, each separated by a narrow perimeter of fabric containing interconnected high strength polyester tendons.

The fabric forms are positioned on the area to be protected, and then filled with a structural grout to form a mattress of individual pillow shaped, rectangular, blocks in a bonded block pattern. The polyester tendons become embedded in the cured grout to tie the blocks together and enable the mat to resist separation in multiple directions, as well as provide a hinge point for articulation. Patented separate cable duct design assures that the revetment cables will be positioned securely in the center of each block. Relief of hydrostatic uplift pressure, caused by entrapped and ground water is provided through the narrow perimeter of interwoven fabric after the grout has hardened. The Ercoform Articulating Block Mat (ABM) is custom fabricated into multiple mill width panels, designed to fit actual project sites.

TYPICAL DIMENSIONS AND WEIGHTS				
MAT CLASS	E-60	E-80	E-100	Eco-Flex
Average Thickness, (in)	4	6	8	4
Nominal Block Dim., (in)	20 x 14	20 x 20	20 x 26	20 x 14
Weight/Block (lbs)	90	195	325	90
Weight/Unit Area (lb/ft ²)	60	80	100	42
Concrete Coverage (ft ² /cy)	63	47	38	90

INSTALLATION PROCESS

Site Preparation

Slope grading equipment is used to excavate to required depths, contour the slopes to the specified slope ratio and form the anchor, toe and terminal trenches around the periphery of the installation. The area to be protected must be free of rock, brush, roots or large soil clods. Ercoform™ should be placed on a compacted sub-grade and stable slope. The fabric forms are usually anchored into a trench 3 to 5 feet deep, by 3 feet wide, at the top of the slope, which is dependent on project site substrate.

Panel Placement and Field Assembly

Once the slope and other related excavation conforms to finished grade and elevation specifications, installation of the filter fabric and the Ercoform™ fabric forms may begin. After a site specific filter fabric has been installed, the custom sized **Ercoform™** panels are rolled down the slope and positioned. The panels are positioned according to prepared drawings where each panel is identified for placement. The panel is then unfolded and pulled into position. The Ercoform™ panels are positioned loosely along the slope. Once positioned, the upper edge of the panel is folded into the anchor trench atop the slope.

Inspection Before Filling

All mats are inspected prior to pumping to ensure no major tears or rips are present. As much as 10% contraction in each direction may be expected during the filling process.

Structural Grout Pumping

The Ercoform™ mat is carefully inflated by the work crew, making sure not to overfill the mat. The process is highly efficient since our crews are well established and the

members have been working together for years.

Finalizing The Site

Once pumping is completed, the trenches are backfilled and the slopes of the project site are returned to pre-construction contours, as determined by the construction drawings.