

Product Evaluation

RE: Review of Cable Concrete (CC35, CC45, CC70 and CC G2)

PRODUCT

Cable Concrete Articulated Concrete Block Revetment System is manufactured by IECS Environmental INC located in Rodney, Ontario and it is supplied by its branch in Calgary.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Cable Concrete is an Articulated Concrete Block (ACB) Revetment System which controls various types of erosion due to water, wind or vehicular traffic. Cable concrete Mats are made with air entrained concrete for durability and freeze-thaw fracture resistance. CC35, CC45 and CC70 contain 20% of open area and CC G2 contains 40% of open area to provide water permeability and vegetation growth. Product web link: <http://iecs.com/>

DESCRIPTION:

Cable Concrete consists of concrete blocks connected by cables allowing each individual block to be flexible and form the terrain of the ground. Geotextile fabric can be attached to the base of each concrete mat. CC35, CC45 and CC70 consist of truncated pyramidal blocks with square top and bottom surfaces and CC G2 consists of hexagonal prism blocks. A standard Cable Concrete mat covers an area of 8ft X 16ft and is available in various weights; 25, 35, 45 and 70 lb/sq ft. Depending upon hydraulic conditions and the slope conditions, appropriate mat can be selected for the project.

POTENTIAL USAGE:

Preventing Slope and Channel bed erosion
Culverts / bridge inlet and outlet protection
Shoreline protection and many other applications

STANDARDS:

ASTM D6884-03 (10) Installation of ACB Revetment Systems
Colorado State University – Hydraulic testing under Controlled Laboratory Conditions
University of Windsor – Hydraulic Model Studies of Cable Concrete Mats

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has some experience with ACB Revetment System.

APPLICATION STANDARDS:

Alberta Transportation does not have a standard for Articulated Concrete Block (ACB) Revetment System.

RECOMMENDATIONS:

Cable Concrete be listed as a Proven Product under Alberta Transportation Products List, -Erosion and Sediment Control Systems – Articulating Concrete Blocks – Proprietary, based on the information provided.

TRIAL PROJECTS

Cougar Creek Channel Bank at HWY1, Canmore

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