

Product ID: 8134-3-5 Initiation Date: July 14, 2022 Revision Date: February 1, 2023 Expiry Date: January 2026

Product Evaluation

RE: Review of Cable Concrete (CC10)

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:

Claims - Cable Concrete (CC10) is an Articulated Concrete Block (ACB) Revetment System / Rolled Erosion Control blanket (RECB) which controls various types of erosion due to water, wind, or vehicular traffic. Cable Concrete CC10 are designed to be placed side by side or end to end to provide an unvarying protective system. Product web link: <u>http://iecs.com/</u>

DESCRIPTION:

Cable Concrete (CC10) standard mattress are 2.44m x 6.1m Long (8'x20') and lengths can be customized. The mats or rolls consist of concrete blocks interlocked by revetment cables or ligature systems, which are poured through each block in both directions. Spacing between blocks provides a +/- 30% opening for vegetation or granular backfill materials. The blocks typically have 101mm (4") square top faces and 159mm (6.25") square bottoms. Various types of underlayment materials can be utilized and provided with the CC10 product which include but not limited too; non-woven geotextiles, Straw/Coconut type Erosion control blankets (ECB), and or a combination of the above paired with a turf reinforcement mat (TRM).

POTENTIAL USAGE:

The system has an extensive range of civil applications and is most commonly used for preventative erosion control measures caused by water, wind, and/or traffic. CC10 is also a very viable solution for hard armoured access applications for access roads, boat launch, and pedestrian pathways.

STANDARDS:

ASTM D6884-03 (10) Installation of ACB Revetment Systems

ASTM D6684 – 04 (Reapproved 2010) - Materials and Manufacture of Articulating Concrete Block (ACB) Revetment Systems

ASTM D6460 – 19 - Standard Test Method for Determination of Rolled Erosion Control Product (RECP) Performance in Protecting Earthen Channels from Storm water-Induced Erosion

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has some experience with light duty ACB Revetment System.

APPLICATION STANDARDS:

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

RECOMMENDATIONS:

Cable Concrete CC10 be listed as a potential Product under Alberta Transportation Products List, -Erosion and Sediment Control Systems – Miscellaneous Erosion and Sediment Control – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

RESTRICTIONS ON USE:

Caveat: Appropriate thickness of the block for specific site conditions shall be determined by a Professional Engineer (registration with APEGA).

perta Government

Product ID: 8134-3-5 Initiation Date: July 14, 2022 Revision Date: February 1, 2023 Expiry Date: January 2026

TRIAL PROJECTS

Rishi Adhikari

cc New Products Evaluation Group – Roger Skirrow