

Product ID:8134-3-3Initiation Date:January 27, 2022Revision Date:February 23, 2022Expiry Date:February 2025

## **Product Evaluation**

### RE: Review of Hydrotex Articulating Block (AB) Mats

### PRODUCT

Hydrotex Articulating Block (AB) Mats is manufactured and distributed in Alberta by synthetex located in Peachtree Corners, Georgia, USA. Website: https://synthetex.com/

## VENDOR CLAIMS AND INFORMATION

#### CLAIMS

The Hydrotex Articulating Block Mats form cable-reinforced concrete block mattresses that resist erosive forces. They are often constructed where a revetment is exposed to frontal attack by wave action.

#### DESCRIPTION

Hydrotex Articulating Block Fabric Formed Concrete Mattress comes in various thicknesses: AB400 (4"), AB600 (6"), AB800 (8") AB1200 (12"). It can be made up to a 24" block size. The AB fabric form consists of a series of compartments linked by an interwoven perimeter. Grout ducts interconnect the compartments, and high strength revetment cables are installed between and through the compartments and grout ducts. Once filled, the AB Mats become a mattress of pillow-shaped, rectangular concrete blocks. The interwoven perimeters between the blocks serve as hinges to permit articulation. The cables remain embedded in the concrete blocks to link the blocks together and facilitate articulation.

#### POTENTIAL USAGE

Hydrotex AB Mats are typically used to protect coastlines, canals, rivers, lakes, reservoirs, underwater pipelines, bridge piers, and other marine structures from propeller wash, ship wakes, wind waves, currents, and high velocity flows. They are also used in environmental construction for landfill caps, down chutes, and collector channels. The product can be installed both in the dry and under water.

#### **STANDARDS**

Study of Hydraulic Stability of Hydrotex Fabric Formed Concrete Mattresses in Steep-Slope and HighVelocity Flow

## ALBERTA TRANSPORTATION COMMENTS

### EXPERIENCE

Alberta Transportation has no experience with this product

#### **APPLICABLE STANDARDS**

Alberta Transportation does not have a standard for Articulating Concrete Blocks for erosion control.

#### RECOMMENDATIONS

Hydrotex Articulating Block Mats be listed as a Potential Product under Alberta Transportation Products List, -Erosion and Sediment Control Systems – Articulating Concrete Blocks – 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 shall be determined by a Professional Engineer (registration with APEGA).

# TRIAL PROJECTS

Rishi Adhikari

cc Innovations Evaluation Committee – Roger Skirrow,