

Product Evaluation

RE: Review of DRAINTUBE

PRODUCT

DRAINTUBE is manufactured and distributed by Afitex-Textel located in Vancouver, British Columbia.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

DRAINTUBE does away with the need for a layer of clean stone and two geotextile separators also saving excavation time. DRAINTUBE specifically sized and designed for a project will provide the same hydraulic capacity of clean stone. Product website:

<http://www.draintube.net/en/>

DESCRIPTION:

DRAINTUBE consists of a capillary drainage layer and two filter layers comprised of short synthetic fibers which are needle punched together. Included are corrugated polypropylene pipes with two perforations per valley at 180 degree spacing and rotated 90 degrees per valley and inserted longitudinally between the drainage layer during the manufacturing process.

POTENTIAL USAGE:

DRAINTUBE is much easier to install on a low foundation than a layer of clean gravel on a geotextile separator. With the use of DRAINTUBE it replaces the multiple truckloads of stone and significantly lowers the effects of greenhouse gas. DRAINTUBE advantages are: lower costs; faster construction; less excavation and/or backfill, better performance and lower greenhouse gas emissions.

STANDARDS:

ASTM D4632 Grab tensile strength
ASTM D4632 Grab elongation
ASTM D4833 Puncture strength
ASTM D4533 Tear strength
ASTM D5199 Thickness
ASTM D5261 Mass
ASTM D2412 Pipe stiffness
ASTM D4716 Flow rate

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation does not have experience with this product.

APPLICATION STANDARDS:

Alberta Transportation does not have a standard for strip drain.

RECOMMENDATIONS:

DRAINTUBE be listed as a Potential Product under Alberta Transportation Products List, Geosynthetics – Geonet / Geocomposite / Wick Drain – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

Joe Filice

cc Innovations Evaluation Group – Abid Malik
Roger Skirrow
Corinna Mulyk/Jim Gavin