

Product ID: 8145-2

Initiation Date: September 10, 2003 Revision Date: August 20, 2018

Product Evaluation

RE: Review of DuraFrostwick System

PRODUCT

Durafrostwick System manufactured and distributed by Diamond J Industries Ltd located in Rocky Mountain House, AB.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Durafrostwick system has been proven to remedy difficulties pertaining to sub surface soil shifting and de-stabilization in our cold climate region. Product web link: http://www.diamondj.ca/fw pg2.htm

DESCRIPTION:

Extreme seasonal temperature variations of Northern climate disturb subsurface soils below Road Grades and construction projects, Durafrostwick can prevent the up heaving of subsurface soils that fracture the upper surface & create continued return of yearly damage. A cycle creates potholes (road surface damage) in other words frost heaves. The Durafrostwick System utilizes a thoroughly proven insulation product in a unique combination with geosynthetic fabrics, creating a comprehensive thermal and moisture barrier. The foam acts as insulation with it's excellent properties such as compression, high thermal resistance, Low moisture permeability and long term durability. Foam blocks are lap-joined. The top fabric acts as a wicking media and the bottom fabric as a drainage channel for moisture.

POTENTIAL USAGE:

DuraFrostwick System can be used as insulation in the prevention or elimination of frost heaving in existing troubles areas or prevent frost heaves in highly problematic areas on roadways, construction sites, pipeline crossings, permafrost areas, muskeg and building foundations.

STANDARDS:

The flexural property of the DuraFrostwick System (bare foam and foam board lined with geotextiles) was tested by Alberta Research Council. Test method used was ASTM C-203 "Breaking Load and Flexural Properties of Block-Type Thermal Insulation". The test report is on file.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has Incorporated Durafrostwick in its projects.

APPLICATION STANDARDS:

Alberta Transportation does not have a standard for this product.

RECOMMENDATIONS:

Durafrostwick System - listed as a Proven Product under the Alberta Transportation Product List, Frost Barriers – Pavement Insulation Foam – Proprietary based on the information provided.

TRIAL PROJECTS

Rishi Adhikari