

Product Evaluation

RE: Review of Siplast Teranap Geomembrane

PRODUCT

The Siplast Teranap Geomembrane is a waterproofing membrane used on canals. It is manufactured in Mondoubleau, France and distributed by Siplast/Icopal of Irving, Texas.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Teranap can be used as a waterproofing solution for irrigation canals, dams, wastewater storage, fountains, reservoirs and ponds. Siplast developed styrene-butadiene-styrene (SBS) modified bitumens. By properly modifying asphalt with SBS, they produce a highly durable elastomeric blend with exceptional elongation/recovery properties over a wide range of temperatures. It allows Teranap to remain flexible over time, to relax and quickly conform to substrate contours and to withstand settlement changes in the subgrade. The blend is reinforced by two layers of polyester, making Teranap less susceptible to punctures. Teranap's thick, nonwoven polyester geotextile reinforcement layer protects against mechanical punctures and enhances the product's flexibility. Teranap is lightly sanded on one side and has a polyester film bottom layer that protects the geomembrane from subgrade effects. Product web link: <http://www.siplast.com/>

DESCRIPTION:

Ease of installation is a major advantage of Teranap which can be applied over both earthen and concrete substrates. Simple torch seaming technique is applied to eliminate leakage problems and allows for working in winter months.

POTENTIAL USAGE:

Because Teranap Geomembrane has an NSF Potable Approval, it is also suitable for use in potable water storage.

STANDARDS:

Teranap provides own Installation Manual. Teranap has NSF/ANSI Standard 61 (Drinking Water System Components – Health Effects) approval.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation (AIT) have not used Teranap 431 Geomembrane,

APPLICATION STANDARDS:

AT does not have a standard for Teranap Geomembrane.

RECOMMENDATIONS:

Teranap Geomembrane be listed as a Proven Product under Alberta Transportation Product List, Geosynthetics – Geomembranes – Canal Liner - Proprietary, based on the information provided.

TRIAL PROJECTS

LRNID Canal Project

Fred Cheng

cc Innovations Evaluation Group – Abid Malik