

Product Evaluation



Product
ID: 8090-2-6-1
Initiation Date: February 2012
Revision Date: January 4, 2016
Expiry Date: November 2016

RE: Review of Poly-Triplex Liner System

PRODUCT

Poly-Triplex Liner System is manufactured by Poly-Triplex Technologies located in Bonifay, Florida and distributed by IVIS Inc located in Edmonton, Alberta.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Poly-Triplex Liner System uses the existing structure as a mold and enables installation to occur without excavation. The Poly-Triplex Liner is pulled through the culvert and cured in place with air pressure and steam heat injection. Product web link: <http://nodig.com/storefront/polytriplex.html>

DESCRIPTION

Poly-Triplex Liner System consists of 3 layers:

- Layer 1. – Structural fiberglass and epoxy are bonded to the existing structure and cured in place under pressure and steam heat injection.
- Layer 2. – This layer contains 3 critical components, one non-porous membrane with felt fibers embedded on both sides, enabling a mechanical bond between the membrane and the fiberglass.
- Layer 3. – fiberglass and epoxy resin provide structural enhancement and protect the non-porous inner membrane against corrosive attack and abrasion.

POTENTIAL USAGE

Poly-Triplex Liner System has thousands of structures lined for longer than 10 years. The product quality and liner thickness is controlled at the manufacturing plant. It is cured in place at the jobsite in a controlled atmosphere with pressurized air and steam heat injection. Poly-Triplex Liner System has Engineered Certification for 100 year life service.

STANDARDS

ASTMD-638, D695, D790 and D2240

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has no experience with this product. Alberta Transportation has rehabilitated many culverts using plastic and steel liners.

APPLICABLE STANDARDS

Alberta Transportation specification 2.22 Plastic Culvert Extensions and Culvert Liners

RECOMMENDATIONS:

A Poly-Triplex Liner System be listed as a Potential Product under Alberta Transportation Products List, Culverts – Culvert Liner – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance. **Caveat – “Non Bridge Size Culverts Only”**

TRIAL PROJECTS

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow
Clayton Matwychuk/Dave Besuyen
James Poole/Jim Gavin