

Product Evaluation

RE: Review of Soleno (Solflo Max) Polyethylene Pipe

PRODUCT

The Solflo Max pipe is a thermoplastic product made of High Density Polyethylene (HDPE). Solflo Max is a double-wall pipe, the corrugated exterior provides high compression strength and its smooth wall interior insures superior flow characteristics.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Advantages in the use of Solflo Max

- Light weight
- Chemically resistant to most corrosive materials and high acidic soil levels
- Excellent abrasive resistance
- Sections connected with Integral Snap Lock Bell
- Installation is quick and simple

Product web link: <http://www.soleno.com/iweb/an/catalog/index.php?open=1000000>

Solflo Max pipe is available in a range of diameters: 100 mm to 1200 mm.

STANDARDS

The Solflo Max corrugated polyethylene pipe meets ASTM standards F405 and F667, and also meets AASHTO M252 and M294. Corrugated polyethylene pipe also complies with the Canadian Standards Association, CAN/CSA B182.6.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Corrugated HDPE pipe has performed in applications such as road culverts and storm sewer outfalls for many years. Inspection of exposed culvert and storm sewer pipe reveals no visible discoloration or surface damage. HDPE pipe is capable of withstanding continued exposure to the elements, while providing a lifetime of service.

Ultraviolet (UV) weathering is a concern with plastic pipe. Unlike PVC plastic pipe, the polyethylene is blended with carbon black at 2 – 3%. Carbon black is the commonly used additive to protect HDPE from embrittlement due to UV exposure.

HDPE is a plastic with excellent chemical and corrosion resistance. Polyethylene has many years of proven performance in the field and is renowned for its resistance in both extremes of acidity and alkalinity.

RECOMMENDATIONS

Alberta Transportation has used HDPE for culvert drainage on a number of projects since 1989. The Solflo Max product is similar to the HDPE product already in use by the Department. This product is recommended to be placed on the Alberta Transportation Products List as a Proven Product.

TRIAL PROJECTS

Hwy: 3:06 – General Drainage improvements Brocket, Alberta – Installed Nov. 2002

Joe Filice

cc New Product Evaluation Standing Committee - Terry Willis

JF/nv