

COLORADO DEPARTMENT OF TRANSPORTATION
PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No.
5461-22 CDOT USE ONLY

Product Evaluation Coordinator Colorado Department of Transportation 4670 North Holly Street, Unit A Denver, Colorado 80216	Material Code 707.12.01.00	CDOT Use Only
	Material Code description full name Pipe, Repair Lining	CDOT Use Only

PART 1

Product name: Channeline	Product category: Drainage\Culvert Pipe\Culvert Lining[Repair]
Product Representative (name & address): Attn: Michael Rothenberg, Territory Sales Manager Pipe Reline Solutions P.O. Box 1219 Caldwell, Idaho 83606 Phone: (208) 724-7792 E-mail: michael.rothenberg@piperelinesolutions.	Manufacturer (name & address): Attn: Andy Sherwin, andy@channeline-international.com Channeline International Fiberglass Manufacturing L.L.C. PO Box 8091 Dubai, United Arab Emirates Phone: (971) 488-4838 E-mail: sales@channeline-international.com
Web-site address: https://www.piperelinesolutions.com/	Web-site address: https://channeline-international.com/

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
 Channeline is a multi-segmental GRP structural lining system that is manufactured in a "sandwich structure." First, Channeline has an inner structure incorporating a 1.5 mm (0.059") corrosion barrier manufactured from high grade surface veil (impregnated with isophthalic or Vinyl-Ester rein) followed by several layers of impregnated multi-axial engineered fabric and CSM. Next, the core, comprises of carefully metered amounts of blended sand and resin (pre-batched, mixed and evenly applied to the exact wall thickness required). The outer layer is formed using several layers of multi-axial fabric, CSM and resin, and treated with a bonded aggregate to enhance adhesion to the annular grout (during the install phase).
 There is no theoretical limit to the shape and size of Channeline panels. Channeline segments for each rehabilitation project are custom made to provide a precise fit to the shape and size required. With a Manning's of 0.009, Channeline is considered self-cleaning and can incorporate reducers to increase flow even more. Channeline has a 100 year design life and standard lengths of 8'.

Restrictions, (installation and/or use):
Not to be used as a liner smaller than 1' diameters.

Use of the product, (be specific to CDOT highway activities only):
 A lining option that specializes with large diameters, circular, ovoid, egg shaped, elliptical, flattened elliptical, arch barrel, box shapes, and flattened box shapes.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
 Channeline is the only multi-segmental GRP liner on the market and have installed thousands of feet of liner up to 16' diameter across the country & world. No more need to waste time & money digging and replacing arched, irregular, ovoid, egg shaped, and box culverts. With multiple options for installing the liner, the contractor can choose the safest and most efficient option.

- Specifications:** (listing those applicable is required)
- CDOT : **603.07, 712**
 - ASTM :
 - AASHTO:
 - FHWA :
 - other : **WIS 4-34-02, BS5480, ISO 16611:2017, BS 2782/ISO 527**

Certificate of Compliance (COC) provided Certificate of Verification (COV) provided for select categories ONLY

Product Testing: (National/independent laboratories or universities with Report Date.) **Certified Test Report** (CTR) provided to validate all claims.

- NTPEP-AASHTO:
- FHWA :
- other : **Channeline International Certified Test Report (August 22, 2020)**
- other : **Hamilton Kent Certified Test Report (April 29, 2020)**
- other :

State DOT Approvals, (current documentation required): **Expiration Date** **5 Years** **7/08-29-2027**

Sample submitted: yes no n/a Safety Data Sheets (SDS): yes no n/a

Alternate Product Category:

CDOT Product RESTRICTIONS by CDOT Evaluator: Evaluators Signature:

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