



APPLIED FELTS

September 11, 2002

City of Los Angeles
Department of Public Works
650 South Spring St.
Suite 200
Los Angeles, CA 90014-1911
Attn. Mr. Hush S. Lee

Dear Mr. Lee,

Below are the trade names of Applied Felt Tubes you requested. Applied Felts Inc. has one manufacturing facility in the U.S., located in Martinsville, VA. I have also forwarded to Mr. Dave Badgley copies of relevant MSDS for both Applied Felt material and Interplastic CORVE8190 Vinyl Ester Resin. Additionally, we request that the finished liner flexural modulus be tested at 250,000psi.

Trade Name of Applied Felts Tubes

AquaCure - hot cure inversion method conforming to ASTM F-1216
AquaCure PI - hot water cure pull-in method conforming to ASTM F-1743
SteamCure - steam cure for inversion and pull-in liners

MaxLiner - PVC and PU coated for inversion

These products may be marketed under the following trade names:

National Liner
Premier Pipe USA
SanCon Liner
Gelco Liner
Wesco Liner
Impreline
Roto Rooter and other plumbing service lateral service companies

If you require additional information please contact Mr. Badgley or me.

Sincerely,

Walter C. Mattox
General Manager

CITY OF LOS ANGELES CALIFORNIA

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650 SOUTH SPRING ST., SUITE 200
LOS ANGELES, CA 90014-1911

9119-588-1935

Kelly Odell
Gelco Services/ Michels Pipe Services, Divs. of Michels Corp.
1705 Salem Industrial Dr NE
Salem, OR 97303

Dear Mr. Odell:

Re: **APPROVAL - GELCO LINER FORMULATED WITH APPLIED FELTS CIPP TUBE AND INTERPLASTICS CORVE 8190 VINYLESTER RESIN** **W.O. BD001663**

This is in response to your letter dated March 1, 2005. Gelco Liner is approved for sanitary sewer and storm drain rehabilitation as follows:

Trade Name: **Gelco Liner CIPP**
Archive Lab Report: #2003-514-05, dated 7/22/02
City of Los Angeles Public Works Approval: 3/9/05
Approved Diameter Range: 100 mm to 2200 mm (4" to 84")
Installation: SSPWC Section 500-1 as modified by City of Los Angeles Brownbook
Approved Resin: **Interplastics CORVE 8190 Vinylester**
Approved CIPP Tube: Needled polyester felt, Applied Felts, 450 College Drive, Martinsville, VA 24112
Field-cured composite pipe properties:
Initial Flexural Modulus: 1724.1 MPa (250,000 psi) minimum
Initial Tensile Strength: 41.4 MPa (6,000 psi) minimum
Flexural Modulus for 50-year Design: 431.0 MPa (62,500 psi) minimum

The long term (50-year) flexural modulus value is revisable upon submission and acceptance of 10,000-hour constant load tests. Tests must be performed at an approved laboratory, advise this office prior to starting any tests. If you have any questions, please call me at (213)847-8776.

Sincerely,

Hugh S. Lee, Group Manager
Design Standards and Investigations Group
650 S. Spring Street, Suite 400
Los Angeles, California 90014-1913

HL:h/gelco0.wpd;applied4.wpd

cc: Walter Mattox, Applied Felts, Inc., 450 College Drive, Martinsville, VA 24112
E. Achonu, Con Ad Mat Con - M/S 480
R. T. Haug, Exec - M/S 490
W. Lawson, WCCD - M/S 538
A. Vidaurrazaga, SED

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July 29, 2002

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ENGINEERING

VITALY B. TROYAN, P.E.
CITY ENGINEER

650 SOUTH SPRING ST., SUITE 200
LOS ANGELES, CA 90014-1911

GENERAL INFORMATION
Tel.: 213-978-8788 Fax: 213-978-0270

Walter Mattox
Applied Felts, Inc.
450 College Drive
Martinsville, VA 24112

Dear Mr. Mattox:

**Re: CHEMICAL RESISTANCE TEST - APPLIED FELTS CIPP FORMULATED WITH
INTERPLASTICS CORVE 8190**

Attached is Lab No. 2003-514-05, dated July 22, 2002, showing the results of chemical resistance testing for the above pipe rehabilitation product. The CIPP system responded to chemical exposure as follows:

Weight change: Excellent

Hardness change: Excellent

Tensile strength change: Excellent

Elongation: Satisfactory, with reactions noted from sulfuric acid, sodium hydroxide, ammonium hydroxide, nitric acid, ferric chloride, soap and detergent exposures.

The CIPP system is identified as follows:

Trade Name: Applied Felts CIPP

Approved Use: Sanitary Sewer and Storm Drain Pipe Rehabilitation

Installation: SSPWC Section 500-1.4 as modified by Standard Plan S-610

Size Range: The approval process cannot proceed until this is established

Resin: Interplastics CORVE 8190 vinyl ester

Felt tube: Applied Felts polyester, the approval process cannot proceed until further details are established

*Flexural Modulus (Initial and 50-year) and Tensile Strength (Initial)***:*

This CIPP system cannot be specified on City projects until these values are submitted by the manufacturer.

The overall summary is that this material passed SSPWC Section 210-2.3 Chemical Resistance Test. The approval process cannot proceed until we receive the information requested in our June 22, 2001 letter. Similarly, this system cannot be specified on City of Los Angeles projects until manufacturer-recommended design data and long term design values*** are submitted.

W. Mattox

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July 29, 2002

If you have any questions, please call me at (213)847-8776.

Sincerely,



Hugh S. Lee, Group Manager
Design Standards and Investigations Group
650 S. Spring Street, Suite 400
Los Angeles, California 90014-1913

[HSL:hl/applied2.wp5](#)

Attachments (EoD 6/22/01 letter & Lab No. 2003-514-05)