



SMITH-EMERY LABORATORIES

An Independent Commercial Testing Laboratory

781 E. Washington Boulevard - 2nd Floor Los Angeles, California 90021 ♦ (213) 745-5333 ♦ Fax (213) 749-7232

Proj./Job No.: 39475-1
Lab No. L-10-1270

September 2, 2010

CLIENT: *Attn.: Frank Turner*
F.J. TURNER COMPANY
P.O. BOX 20741
RALEIGH, NC 27619

SUBJECT: **Proof Load Test on "MHEXT 24150PE - 24" x 1-1/2" high Polyethylene Manhole Riser (Liner)**
SPECIFICATIONS: AASHTO H-20
SOURCE: Submitted to Smith-Emery Laboratories by client on August 24, 2010
Liner I. D.: NY 1.5 TURNER CO. RALEIGH N.C.
Date Tested: August 26, 2010

Report of Tests

PROCEDURE:

An FJT Liner was placed over a manhole ring frame and covered with a common manhole cover. The full assembly (Please see photos) was placed on a calibrated 0-100,000 pounds DK No. 1 Universal Testing Machine and a concentrated load was applied at center using a 1/4-inch thick reinforced rubber pad (shore hardness "A" 80) on which a 1-inch thick 9-inch by 9-inch square steel plate was placed.

Ten (10) percent of the load required was applied @ 5,000 lbs. for one minute.

The load was applied to the assembly at a rate of 50,000 pounds per minute. Once attained, the 50,000 pound proof load was applied for one minute.

Results are as follows:

Test Number	Material Identification	Diameter Inches	Load, Pounds	Deflection @ Load inches	Permanent Set (No Load)
1	NY1.5 TURNER CO. RALEIGH N.C. (liner)	24"	50,000	.095"	.037"
2	NY1.5 TURNER CO. RALEIGH N.C. (liner)	24"	50,000	.096"	.035"

Respectfully submitted

SMITH-EMERY LABORATORIES

Pingsheng Zhu
Pingsheng Zhu
Registered Civil Engineer No.: C 72482
Registration Expires : 6-30-12



- Materials Tested Comply With Specifications.
- Materials Tested Did Not Comply With Specifications.
- No Established Criteria For Acceptable Limits.

rc

CC: F. J. TURNER COMPANY; SMITH-EMERY LABORATORIES



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SPECIFICATIONS: AASHTO H-20
SOURCE: Submitted to Smith-Emery Laboratories by client on August 24, 2010
Liner I.D.: NY 1.5 TURNER CO. RALEIGH N.C.
Date Tested: September 2, 2010

Report of Tests

PROCEDURE:

Two FJT Liner's (one on top of the other) was placed over a manhole ring frame and covered with a common manhole cover. The full assembly (Please see photos) was placed on a calibrated 0-100,000 pounds DK No. 1 Universal Testing Machine and a concentrated load was applied at center using a 1/4-inch thick reinforced rubber pad (shore hardness "A" 80) on which a 1-inch thick 9-inch by 9-inch square steel plate was placed.

Ten (10) percent of the load required was applied @ 5,000 lbs. for one minute.

The load was applied to the assembly at a rate of 50,000 pounds per minute. Once attained, the 50,000 pound proof load was applied for one minute.

Results are as follows:

Test Number	Material Identification	Diameter Inches	Load, Pounds	Deflection @ Load inches
1	2 pcs.-NY1.5 TURNER CO. RALEIGH N.C. (liner)	24"	50,000	.099"

*NOTES: Permanent set measured at 0.092", after proof load was released.

Respectfully submitted

SMITH-EMERY LABORATORIES

Pingsheng Zhu
Pingsheng Zhu
Registered Civil Engineer No.: C 72482
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- Materials Tested Did Not Comply With Specifications.
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