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"OVER ONE HUNDRED YEARS OF SERVICE"

June 5, 1998  
Richmond, Virginia

Press-Seal Gasket Corporation  
P.O. Box 10482  
Fort Wayne, IN 46852  
Attn: Mr. Michael R. Miller

Hydrostatic Testing of Press-Seal Gasket  
flexible pipe-to-manhole connectors  
per ASTM C923  
F&R Project No. Z60-141

Gentlemen:

As requested, a representative of Froehling & Robertson's staff was present to witness several hydrostatic tests performed on pipe-to-manhole connections. Two types of gaskets, the Kwik Seal Gasket (for 8" SDR 35 PVC pipe) and the PSX Gasket (12" diameter gasket for 8" PVC pipe), were tested. These tests were performed on May 20, 1998 in Richmond, Virginia.

This performance testing was performed in accordance with ASTM C 923, "Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes and Laterals". This specification covers the minimum performance requirements for resilient connectors used for connections between precast reinforced concrete manholes and pipes. The gaskets are required to sustain 10 psi pressure for a period of 10 minutes.

The following tests were performed:

8" Kwik Seal Gasket

- 1200 Lb. (150 Lb./inch pipe diameter) shear load @ 10 psi for 10 minutes
- straight alignment @ 10 psi for 10 minutes
- axial deflection of 7 degrees @ 10 psi for 10 minutes
- straight alignment @ 13 psi for 10 minutes

PSX Gasket

- 1200 Lb. (150 Lb./inch pipe diameter) shear load @ 10 psi for 10 minutes
- straight alignment @ 10 psi for 10 minutes
- axial deflection of 7 degrees @ 10 psi for 10 minutes
- straight alignment @ 13 psi for 10 minutes

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The above listed tests were performed using an Ashroft Dial Gauge, MS SW#46496, calibrated 5/9/98.

The tests performed satisfactorily met the performance requirements of ASTM C923.

Respectfully Submitted,  
FROEHLING & ROBERTSON, INC.



Steven C. Kerr, P.E.  
Materials Engineer