TEST REPORT
CAST-A-SEAL Pipe-to-Structure Connector
May 13, 1969
M. H. Miller

Purpose of Test: The Cast-A-Seal connector was designed as a pipe-to-septic tank connector. Although general performance standards exist for septic tanks, watertightness requirements are not well-defined. Therefore, this test was conducted under the requirements of ASTM C923, a watertightness specification for pipe connections to manholes. ASTM C923 would appear to surpass any watertightness requirements required of a septic tank.

Test Materials and Method: Two Cast-A-Seal connectors were cast into the sidewalls of a 2' x 3' rectangular catch basin. One section of 4" nominal Schedule 40 PVC pipe was inserted through each connector and the two sections were joined inside the structure using a flexible "Fenco"-style coupler. Take-up clamps on each connector and at both ends of the coupler were tightened using a torque-limiting ratchet as recommended. A cast flat lid with water inlet and outlet tubes was fitted to the basin using preformed butyl sealant to seal the joint, and the lid was held in place by a steel frame to prevent displacement during the pressurized test. The test was conducted by filling the vessel with potable water, and then sealing the vessel while adding sufficient additional water to develop an internal hydrostatic pressure of 10 psi. A calibrated gauge was used to measure all pressures.

Test Results: The vessel containing the two Cast-A-Seal connectors was pressurized to 10 psi and the connectors were observed closely for ten (10) minutes. No moisture was visible around either connector during the test. Due to some minor through-wall leaking of the concrete structure itself, it was necessary to add a small amount of water during the test. Test pressure was monitored carefully and at no time was it permitted to drop below 10.0 psi.

Conclusions: The Cast-A-Seal connector passed the hydrostatic test pressure requirement of ASTM C923.

Respectfully submitted,

[Signature]
Michael R. Miller
Research & Development

County of Allen
State of Indiana

Sworn to before me and subscribed in my presence,
This 13th day of May, 1969.

[Signature]
Lora A. Lowery
Secretary

Notary Public
My commission expires: June 30, 2000