

SPECIFICATION FOR PARSON STAINLESS STEEL MANHOLE INSERTS

1. SCOPE

1.1 Contractor shall furnish PARSON STAINLESS STEEL MANHOLE INSERTS as called for in the specification.

1.2 The PARSON MANHOLE INSERT shall effectively reduce or prevent surface water inflow through manhole covers. The insert shall also prove effective in keeping grit, sand, salt, chemical spills, foreign objects, road oils, etc. from entering the manhole and collection system lines.

2. MATERIAL & DESIGN

2.1 The PARSON STAINLESS STEEL MANHOLE INSERT and components shall be manufactured of materials resistant to corrosion from atmospheres containing hydrogen sulfide and dilute sulfuric acid.

2.2 The PARSON STAINLESS STEEL MANHOLE INSERT shall be manufactured of 304 stainless steel with a thickness of not less than 18 gauge. The insert shall have a straight side design to allow a loose fit into ring for easy removal. The insert manufacturer must furnish a "load test verification" showing a load test failure in excess of 3,000 lbs. For added strength, no less than three (3) ribs shall be stamped in the bottom of the dish.

2.3 The gasket shall be made of closed-cell neoprene, and shall have a pressure sensitive adhesive on one side. The gasket shall be installed by the manufacturer and must be compatible with the insert material to form a long lasting bond in wet or dry conditions.

2.4 The gas relief valve shall be designed to release at a pressure of .5 to 1.5 psi and have a water leak down rate no greater than 5 gallons per 24 hours. The valve shall be installed in the insert by means of a hole tapped in the insert by the manufacturer. The valve shall be made of nitrile from prevention of corrosion from contact with hydrogen sulfide, dilute sulfuric acid and other gases associated with wastewater collection systems.

2.5 The PARSON STAINLESS STEEL MANHOLE INSERT shall have a handle made of 1" wide heavy nylon webbing. The handle shall be attached with a #6 high-grade stainless steel rivet and washer. The handle shall be installed in such a manner that it does not interfere with the installation of the manhole lid. The handle shall be able to withstand a pull force of 500 pounds of force before it fails or separates from the insert.

3. INSTALLATION

The manhole frame shall be free of all dirt and debris prior to the installation of the PARSON STAINLESS STEEL MANHOLE INSERT. The PARSON STAINLESS STEEL MANHOLE INSERT should be fully seated around the manhole frame rim to insure against water seepage between the insert and manhole frame rim. A generous coating of grease on the gasket is helpful in seating and prevents rust.

4. TESTING

After installation of the PARSON STAINLESS STEEL INSERT, it shall not allow more than 1 gallon of inflow per 24 hours.