

## SPECIFICATIONS FOR PARSON MANHOLE INSERTS - V2P

### 1. SCOPE

Under this item, the contractor shall furnish to the manufacturer's recommendations PARSON V2P MANHOLE INSERTS as called for in the specifications.

### 2. MATERIAL AND DESIGN

#### 2.1 General

The PARSON V2P MANHOLE INSERT and each of its components, the valve bodies, the valve plugs, the valve springs and the gasket shall be manufactured of plastic, stainless steel, or other corrosion proof material.

#### 2.2 The Insert

The PARSON V2P MANHOLE INSERT shall be manufactured from High Density, high molecular weight Polyethylene Copolymer material that meets ASTM Specifications Designation D1248 Class A, Category 5, Type III. This material shall have superior stress crack resistance, combined with a high impact strength. The Insert shall have a minimum impact brittleness temperature of -180°F in accordance with ASTM D746-70. Softening temperature shall be 254°F, meeting all requirements of ASTM D1525-70. The PARSON V2P MANHOLE INSERT shall have a tensile strength of 3800 psi and an elongation factor of 800%, meeting all the requirements of ASTM D638-71A. The finish thickness shall be a uniform 1/8". The Insert shall be manufactured to the dimensions as shown on the contract drawings to allow easy installation within the manhole frame.

#### 2.3 The Gasket

The gasket shall be manufactured of closed-cell cross-linked polyethylene and meet the requirements of ASTM D395, D1564, D624, and D1667. The gasket shall be factory installed.

#### 2.4 The Relief Valves (2)

The gas relief valve and the vacuum relief valve shall be designed to release at a pressure differential equivalent to approximately 1.00 psi and 2.00 psi respectively. The valve body shall be manufactured of specially formulated plastic polymers and the valve plug shall be neoprene confined within a stainless steel spring.

### 3. MEASUREMENT

The PARSON MANHOLE INSERT shall be manufactured and finished to fit upon the manhole frame rim upon which the manhole cover rests. Exact field measurements for existing manhole frames will be required in writing from the purchaser prior to the production of the Insert. Special instructions will be made available to the purchaser and/or engineer for proper measurements.

### 4. INSTALLATION

4.1 The manhole frame rim shall be cleaned of all dirt and debris before placing the PARSON V2P MANHOLE INSERT upon the rim.

4.2 The PARSON V2P MANHOLE INSERT shall be fully seated around the manhole frame rim.

4.3 The manhole cover is replaced as before, and the installation is complete.

### 5. REMOVAL

The PARSON V2P MANHOLE INSERT shall have a corrosion resistant 1" heavy weight polypropylene strap installed for easy removal and re-installation into the manhole frame.

### 6. TESTING

After installation of the PARSON V2P MANHOLE INSERT, it shall not allow more than 1 gallon of inflow per 24 hours.