

SECTION 02625**SANITARY SEWER MANHOLE INFILTRATION INSERT****PART 1 - GENERAL**

1.01 SCOPE

This section specifies sanitary sewer manhole infiltration inserts. Manhole inserts shall be furnished and installed in all new sanitary sewer manholes and all manholes to be rehabilitated as part of the Project.

PART 2 - PRODUCTS

2.01 GENERAL

The manhole infiltration inserts furnished shall be the product of firms which have been regularly engaged in the manufacture of such items for a period of at least five (5) years.

2.02 MATERIAL

- A. All materials used in the manufacture of the infiltration inserts shall be highly resistant to corrosion from sanitary sewer atmospheres containing hydrogen sulfide and dilute sulfuric acid.
- B. Infiltration insert body shall be manufactured of High Density Polyethylene meeting the requirements of American Society for Testing and Materials Standard D1248-84 (Reapproved 1989), Polyethylene Plastics Molding and Extrusion Materials, Type III, Class A, Category 5 or stainless steel, when required by the Department.
- C. Insert body thickness shall be a minimum of .125 inches. Inflow dish shall be one piece molded with structural ribbing members in the bowl area for extra structural integrity. Inflow dish is to have smooth radius molded edges for additional strength and prevention of cracking. The insert shall have a straight-side design to allow penetration of the manhole lid dropping through the clear opening of the manhole frame. The depth of the infiltration insert shall be a minimum of 5 inches from the smooth radius molded edge to the center of the bowl area. The insert shall be designed to provide a sufficiently loose fit into the manhole frame to allow easy removal. Manufacturers name and the date manufactured shall be molded into the inflow dish.
- D. The infiltration inserts shall be dimensioned to fit sanitary sewer manholes as shown on the Miami Dade Water and Sewer Departments Standard Detail #SS4.0, "Type "A" Manhole cover and Frame" pages 1 and 2 of 2.
- E. The gasket shall be a minimum of .5 inches wide and shall be a minimum thickness of .125 inches installed by the manufacturer and shall be envelope type, providing a seal on the lower side of that portion of the insert, which sits in the manhole frame. The gasket shall be closed cell Neoprene rubber and shall provide a watertight seal when installed. The gasket

shall be permanently attached to the insert by means of chemical bonding, (or waterproof adhesive). The maximum amount of leakage through the infiltration insert shall be five (5) gallons in twenty-four (24) hours.

- F. Ventilation is provided by a vent hole on the side of the bowl.
- G. A handle made of nylon webbing no less than one (1) inch wide, shall be located so that it does not interfere with the installation of the manhole lid, yet still provide for easy removal of the infiltration insert. Corrosion resistant fasteners shall be used to fasten the nylon webbing to the inflow dish. The handle shall be able to withstand a pull of at least 500 pounds before failure or separation from the insert body.
- H. Bidders may be required to submit a sample inflow dish along with a complete detailed specification and certifications referenced in this document for evaluation.
- I. The County reserves the right to perform its own testing procedures or to send any and all samples to any laboratory for analysis. On the basis of this testing and analysis, the County shall be the sole judge of the acceptability of the sample in conformance with the specifications and its decision will be final. Any sample submitted shall create an express warranty that the whole of the goods to be provided by the contractor shall conform to the sample submitted.
- J. Five (5) year warranty against defects.
- K. Insert shall be an "Inflow Defender" by USSI, LLC; Venice, FL; (941) 926-2646 or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Inserts shall be installed in accordance with the manufacturer recommendations.
- B. The Department reserves the right to require installation of stainless steel inserts, as required.
- C. Manhole frame shall be set so that the tops of the covers are flush with the adjoining pavement or ground surface.

- END OF SECTION -