

INTENT

To provide a system for eliminating inflow to your municipality's sanitary sewer system, while reducing the infiltration of street level contaminants, controlling the escape of undesirable sewage odor, and minimizing traffic related manhole noise and cover displacement.

1 SCOPE

Under this item, the contractor shall supply and install to manufacturer's recommendations a Rainstopper manhole insert as shown on contract drawings and specified hereafter.

2 MATERIALS AND DESIGN

2.1 GENERAL

The Rainstopper insert and components shall be manufactured of materials resistant to corrosion from atmospheres containing hydrogen sulfide and dilute sulfuric acid.

2.2 INSERT

The insert body shall be manufactured of 316 stainless steel with a thickness of not less than 16 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 3000 lbs. For added strength, no less than three (3) ribs shall be stamped in the bottom of the dish.

2.3 RELIEF VALVE

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 for prevention of corrosion from contact with hydrogen sulfide, dilute sulfuric acid and other gases associated with waste-water collection systems.

2.4 GASKET

The gasket shall be made of closed cell neoprene containing 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.

2.5 HANDLE

The dish shall have a handle of 1" wide nylon webbing and shall be attached with a #6 high-grade stainless-steel rivet and washers. The handle shall be installed on the insert in such a manner as not to interfere with the installation of the manhole lid. The handle shall be able to withstand a pull of 500 lbs. of force prior to failing or separating from insert.

3 INSTALLATION

The manhole frame rim shall be free of all dirt and debris prior to the installation of the insert. The Rainstopper insert should be fully seated around the manhole frame rim to ensure 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 MANUFACTURER

The manhole insert shall be manufactured by:
Rainstopper, Inc. at 6905 Westport Ave, Shreveport, LA, 71129 (318-687-4330).

5 LIMITED WARRANTY

Limited fifteen-year replacement warranty: If an insert is defective in materials or workmanship within fifteen years of purchase, it will be replaced free of charge by Rainstopper if not damaged through mishandling, accident, or abnormal use, and excludes replacement of handle and valve.

