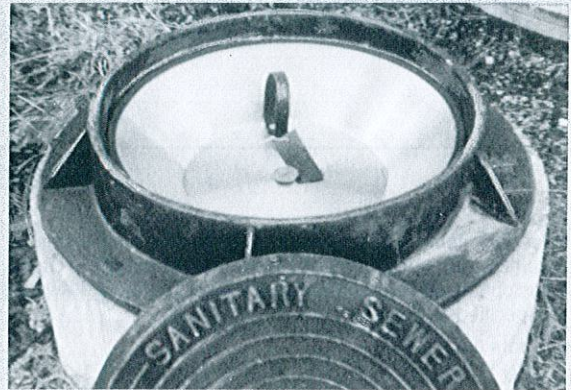


STAINLESS STEEL "RAINSTOPPER"™

Won't stop the rain, but will stop the rising costs of sewage treatment.

Unwanted rainwater adds to the cost of sewage treatment. Now this rainwater can be eliminated from the system with the new Stainless Steel "Rainstopper" manhole cover insert!



Patent No: 4919 564; 4957 389; 5727 351; 5966 876

Estimates on Rainwater treatment costs per manhole

On an average rainy day a manhole will allow 2,000 to 9,000 gallons of inflow to the treatment system.

MINIMUM COST

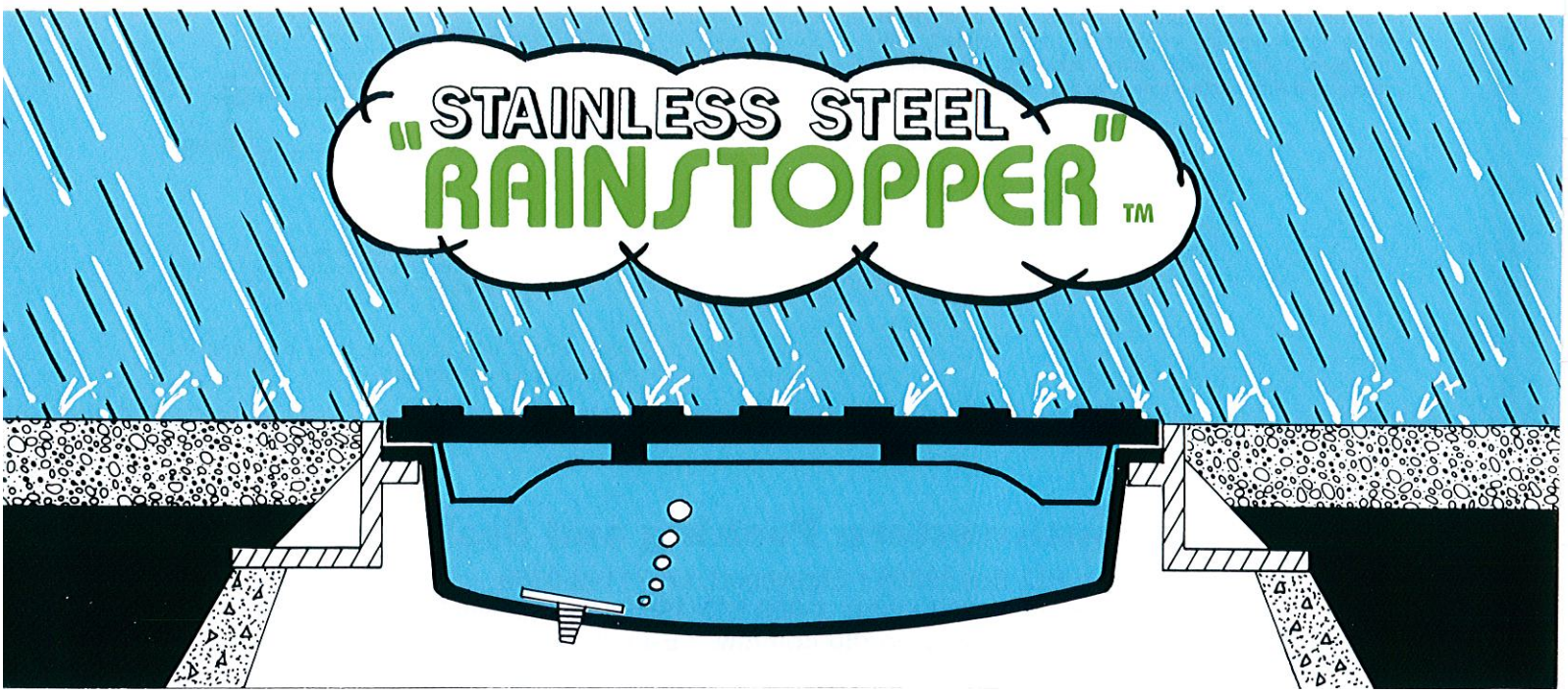
\$50.00 per year per manhole*

MAXIMUM COST

\$500.00 per year per manhole*

*These figures based on an average yearly rainfall in the SW region and selected engineers' estimate on sewage treatment cost.

STAINLESS STEEL
"RAINSTOPPER"™



FEATURES

- Easily installed by one person.
- Made from Corrosion Resistant High Strength Stainless Steel.
- Weighs only ten pounds.
- Sewer gas will be vented with a non-mechanical device.
- Less maintenance due to no moving parts.

BENEFITS

- Stops flow of rainwater into sewage systems.
- Control manhole odors
- Keeps dirt out of system
- Helps prevent manhole rattling and flipping due to street traffic.
- Won't fall into manhole.

SPECIFICATIONS

1. Scope

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

2. Materials and Design

General

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

The Insert

2.2 The insert body shall be manufactured of 304 stainless steel with a thickness of not less than 18 gage. 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.

The Gasket

2.3 The gasket shall be made of close 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.

Relief Valve

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

The Handle

2.5 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 that it does not interfere with the installation of the manhole lid the handle shall be able to withstand a pull of 500 pounds of force before it fails or separates from the insert.

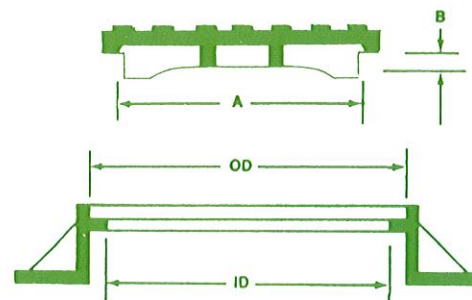
3. INSTALLATION

The manhole frame rim shall be free of all dirt and debris prior to the installation of the "Rainstopper" insert. The "Rainstopper" 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. MANUFACTURER

The manhole insert shall be manufactured by Southwestern Packing & Seals, Inc. 800-843-4950, 6905 Westport Avenue, Shreveport, LA 71129 or prior approved equal.

When ordering "Rainstopper" manhole inserts, the following dimensions should be furnished:



ID - Inside Frame Diameter (Clear Opening)
OD - Outside Frame Diameter (Seat Diameter)
A - Drop Ring Diameter
B - Drop Ring Depth (From Underside Cover)

Note: Some lids have no drop ring and are essentially flat underneath.

Southwestern Packing and Seals

P.O. Box 19369 • Shreveport, LA 71149-0369

Phone 318-687-4330 • Wats 1-800-843-4950 • Fax 318-687-4337

WEB ADDRESS: <http://www.no-dig.com/sw/> • E-mail: rainstoppers@aol.com