

# STORM/SANITARY MANHOLES

Residential & Commercial



*Manholes are designed to the latest ASTM specifications. Our manholes, both storm and sanitary, can have holes cast in or bored to your piping configurations.*

*Sanitary manholes can be ordered with cast in flow channels.*

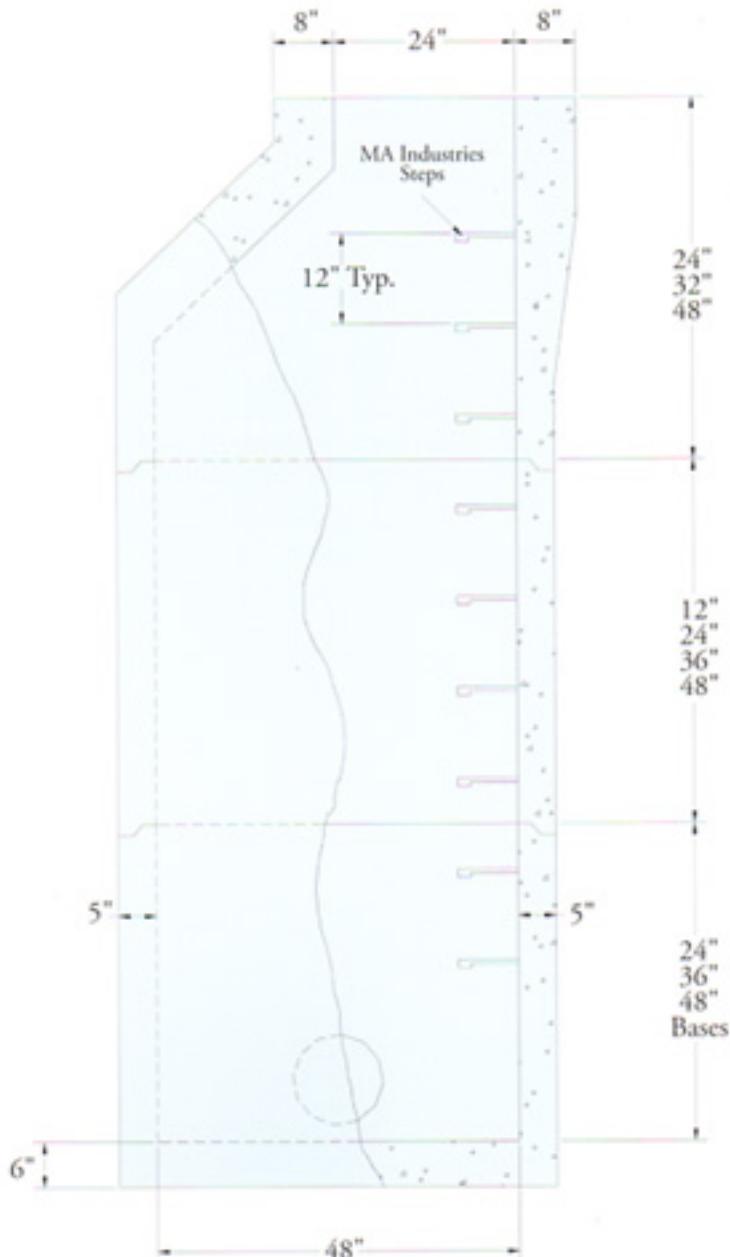
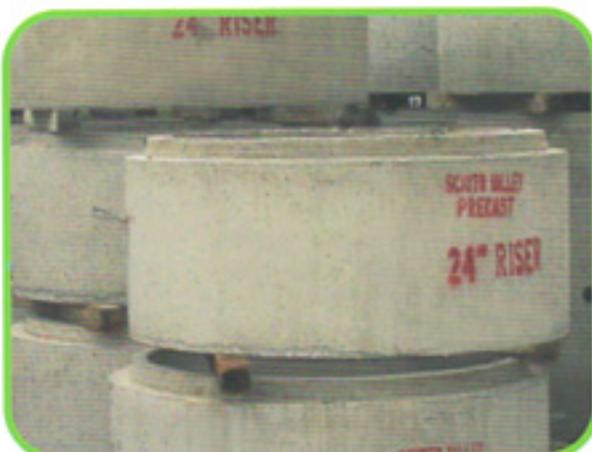
## SCIOTO VALLEY PRECAST

American Made Products From A Family Owned Company

Phone: 740-663-2659 Fax: 740-663-2017

[www.sciotovalleyprecast.com](http://www.sciotovalleyprecast.com)

# 48 INCH STANDARD MANHOLES



## NOTES

*Joint Gasket shall be by Hamilton-Kent Rubber Gasket*

\* *Joint Sealant – Conseal by Concrete Sealants*

\* *Pipe Gasket to be A-Lok G3 Boot*

\* *Precast Flow Channels available*

\* *Inside Drop by Recliner Available*

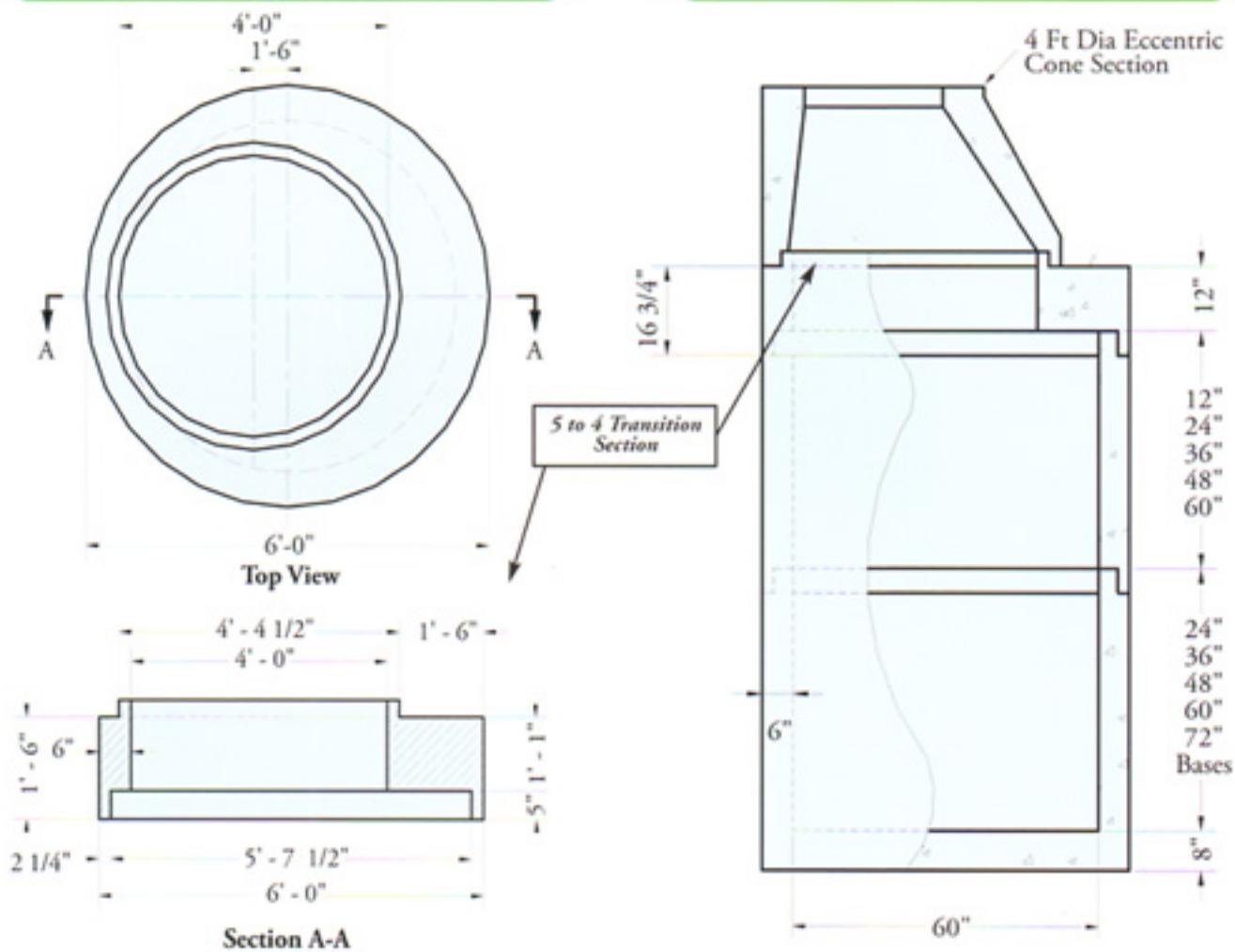
## SPECIFICATIONS

*\*\* Reinforcing shall conform to A.S.T.M. Designations C-478 Precast Reinforced, Concrete Sections*

\* *Joints to conform to AASHTO M198  
A) Rubber Gasket Or B) Flexible Plastic Gaskets*

\* *Steps shall be MA Industries PS1-PF; Install 12" on centers*

# 60 INCH STANDARD MANHOLES



## NOTES

*Joint Gasket shall be by Hamilton-Kent Rubber Gasket*

\* *Joint Sealant – Conceal by Concrete Sealants*

\* *Pipe Gasket to be A-Lok G3 Boot*

\* *Precast Flow Channels available*

\* *Inside Drop by Recliner Available*

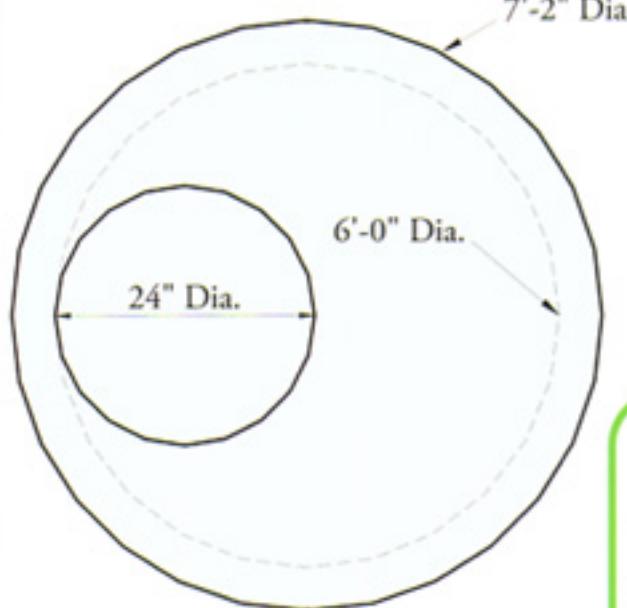
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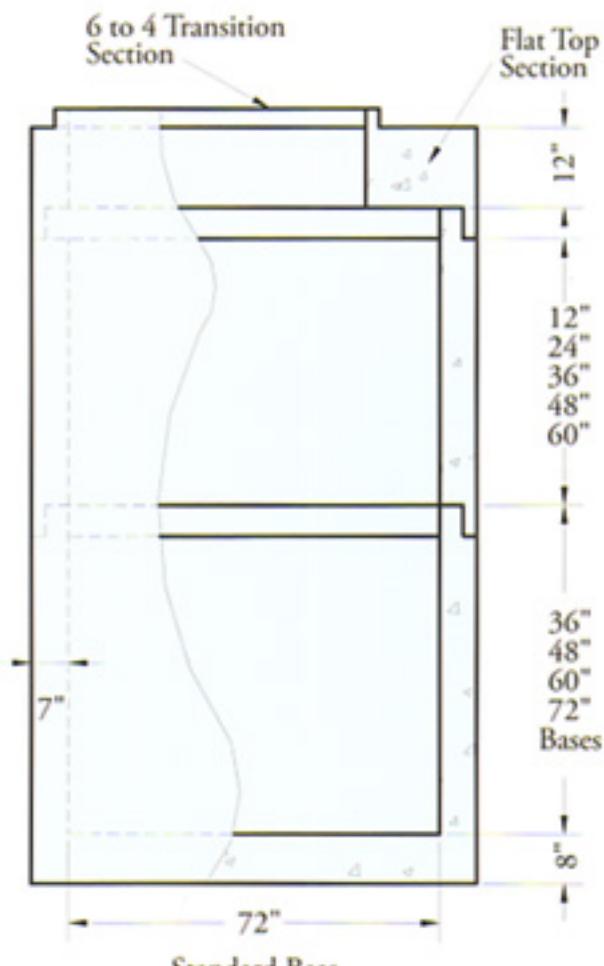
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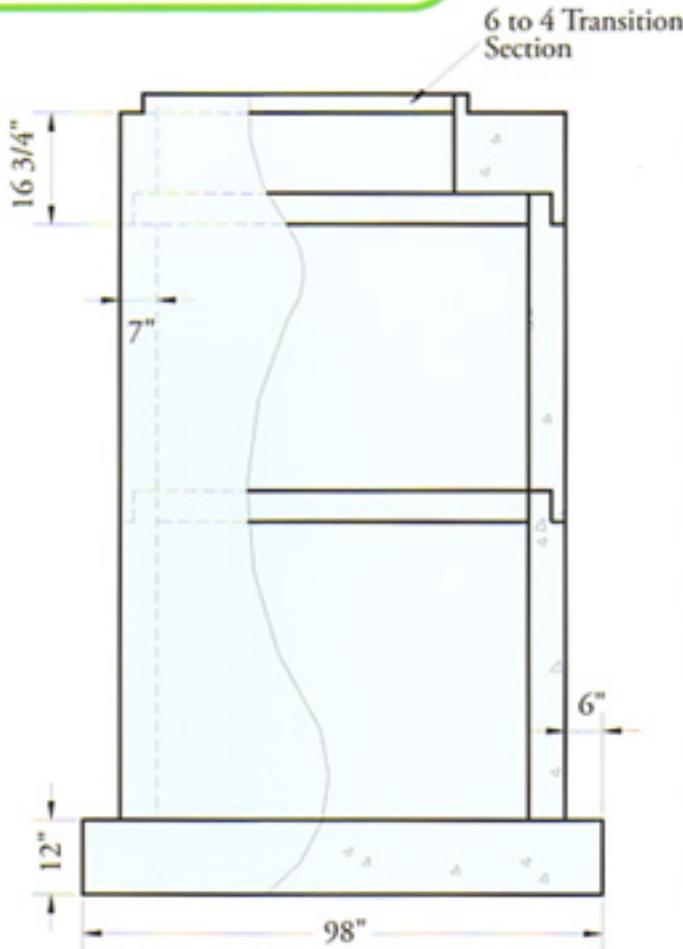
# 72 INCH STANDARD MANHOLES



Top View Transition Section



Standard Base



Floatation Base

## NOTES

\*Joint Gasket shall be by Hamilton-Kent Rubber Gasket

\*Joint Sealant-Conseal by Concrete Sealants

\*Pipe Gasket to be A-Lok G3 Boot.

\*Precast Flow Channel Available.

\*Inside Drop by Recliner Available.

## SPECIFICATIONS

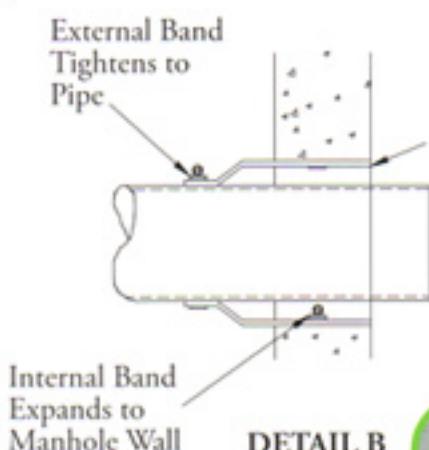
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\*Joints to conform to AASHTO M198:

A) Rubber Gasket or B) Flexible Plastic Gaskets

\*Steps shall be MA Industries PSI-PF; Install 12" on centers.

# G3 BOOT SYSTEM



DETAIL B

A-Lok G3  
Boot System  
Dr NPC Boot  
System

Pipe

See Detail B



SECTION VIEW

**Simple • Wrinkle-Free • Revolutionary • Micro-Adjustable**

## A-LOK G3 Boot System Specifications

*Requirements - Meets or Exceeds ASTM C-923 Latest Revision*

*Diameter Ranges - 6" thru 36" Pipe O.D.*

*Gasket Material - Isoprene Rubber*

*Durability - Not affected by Sulfuric or Hydrochloric Acids*

**G3 Boot System**  
*Pipe to Manhole Connector for Sanitary or Stormwater Systems*

The Revolutionary G3 Band makes installation into a structure simple and fast. Just install the connector perpendicular to the hole and tighten the stainless steel nut. As the nut is tightened, a compressive force is applied to the G3 band ends, causing them to slide past each other into straight alignment. This movement increases the bands overall circumference and compresses the connector against the opening in the structure wall, creating a watertight seal. To insure the best seal, place the bolt in the 12 o'clock position of the hole opening and tighten the nut to the specified torque value.

G3 Boot System can withstand 15 degrees of omnidirectional deflection and  $\frac{1}{2}$ " of centerline offset while still maintaining a watertight connection. This flexibility eliminates infiltration due to pipe shear caused by settlement or ground movement.

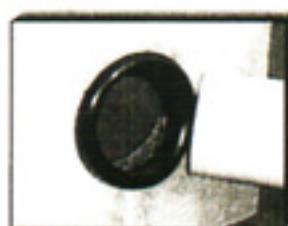
The inner O-ring design of the G3 Connector eliminates rubber wrinkling, compensates for pipe irregularity and wall thickness to insure a watertight seal.



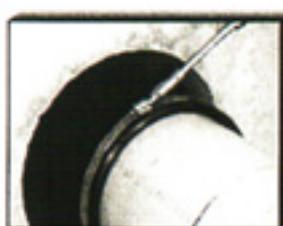
**G3 BOOT SYSTEM**



1) Position Boot & Band in hole, then tighten with torque wrench to 25 ft/lbs..



2) Insert pipe into rolled back connector. To install inside structure affix clamp behind O-ring Torque to 60 in. / lbs. and backfill.



3) For outside mount: pull pipe back and affix clamp directly behind O-Ring and torque to 60 in./lbs. and backfill  
OR

# TYLOX SUPERSEAL GASKETS

## TSS Series

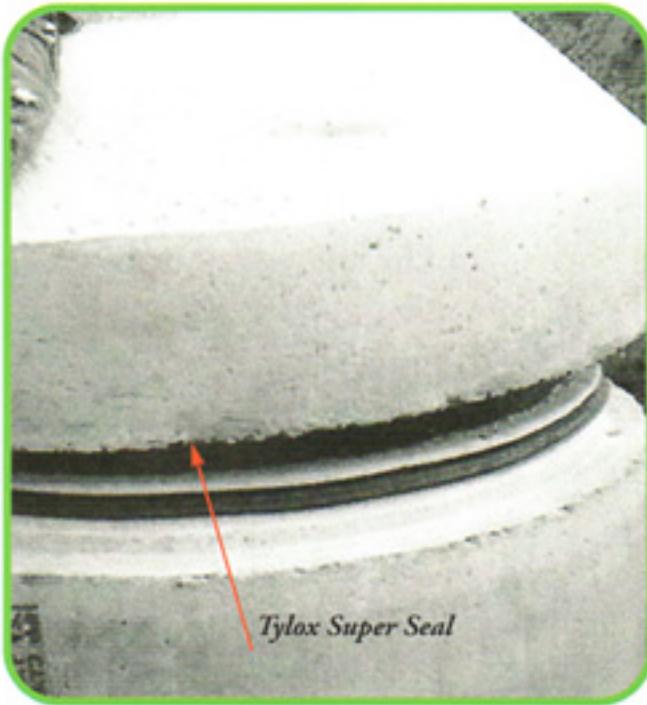
Tylox SuperSeal™ Pre-lubricated Profile Gaskets for Single Offset Joints on Concrete Manhole.

Say good-bye to the lube bucket and brush.  
Say hello to fast, clean, simple installation.

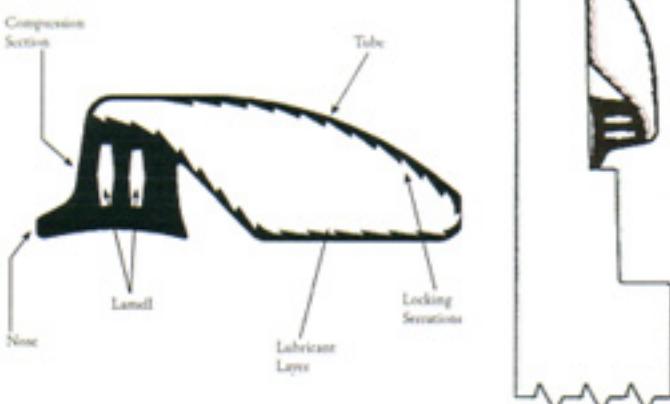
The unique design of the Tylox SuperSeal™ manhole gasket is bringing a cost-saving revolution to the field of concrete manhole gasketing and installation.

- **Requires no field lubrication.** The Tylox SuperSeal™ gasket has a layer of silicone lubricant installed on the inner surface of the tube, during the manufacturing process; saving you time and money, on the job-site.
- **Elimination of un-safe installation practices.** Since the Tylox SuperSeal™ manhole gasket requires no lubrication, the unsafe practice of standing beneath a suspended riser section, in order to lubricate the bell I.D., is no longer required.
- **Self-Contained Lubricant.** Sealed within the tube, the lubricant is impervious to mud, dirt and debris. If you drop it in the trench, simply wipe the gasket surface clean and you're ready to install. No special handling is required.
- **No equalization required.** Due to the reduced gasket stretch requirement of the unique lamelle rolling-tube design, the Tylox SuperSeal™ gasket requires no equalization after installation. A quick and easy installation means you save even more time and money.
- **No gasket "roll" or "twist".** Another benefit of the unique lamelle/rolling-tube design is the drastic reduction in insertion forces, virtually eliminating the gasket "roll" and "twist" associated with o-ring and standard profile gaskets.
- **Self-Centering.** The manhole bell is self-centered, on the spigot, due to the forces generated as the tube rolls into the annular space during the homing process.

Tylox SuperSeal™ gaskets are available for all common combinations of annular and total annular spaces, and can be manufactured to suit any manhole size.



Tylox SuperSeal™ manhole gaskets are available in a variety of rubber compounds, to meet, or exceed, the material requirements of ASTM C443, ASTM C1619, California Green book, and CSA A-257.



*Making Infrastructure Water-Tight, TODAY!  
For a Greener, Sustainable Tomorrow!*

# MANHOLE FLOW CHANNELS

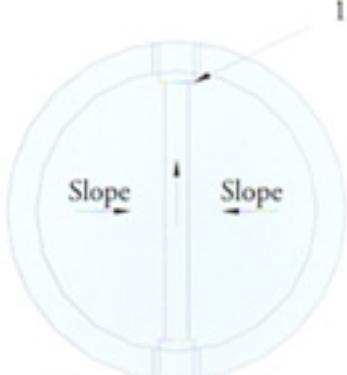
8 inch and 12 inch Cast in Manhole Flow Channels



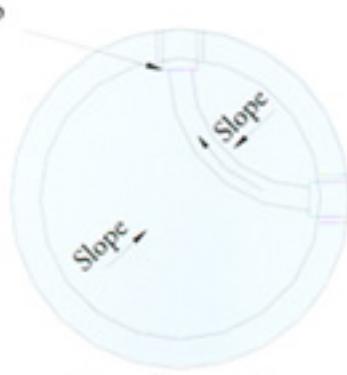
Typical 3 Way Flow



Typical 4 Way Flow



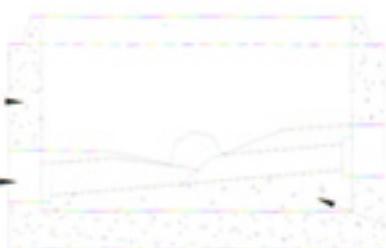
Typical Straight Flow



Typical Curve Flow

Precast  
Monolithic  
Base

Holes placed  
as Required



Section View

Precast Invert  
as required

## Specifications

Concrete Strength - 4500 PSI  
( $3.10 \times 10 < 8 \text{ Pa}$ ) @ 28 days

Invert Depth - 1/2 Depth of  
Pipe

Grade of Fall - Per Job  
Requirements

Bench - 1" max. above center  
line of highest inlet varying  
invert depth. Alternative Bench.



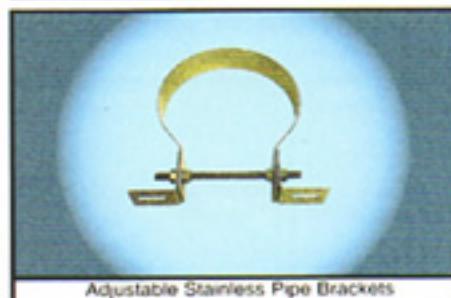
# INSIDE DROP SYSTEM



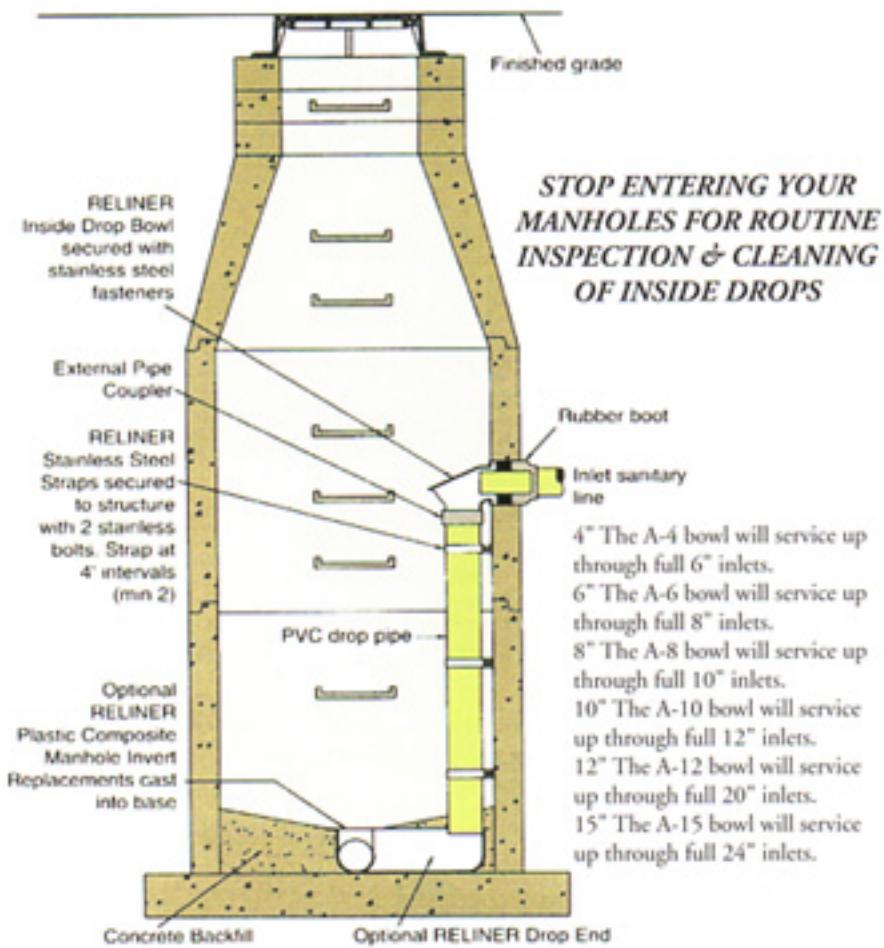
Inside Drop Bowl



Inside Drop Bowl with Hood



Adjustable Stainless Pipe Brackets



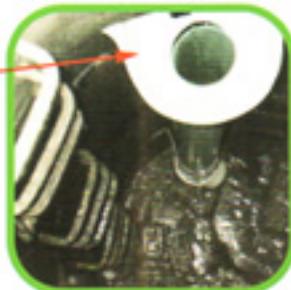
Drop Bowl Installed with optional recliner channels

Custom 48/36" Drop Bowl with 18" Brackets

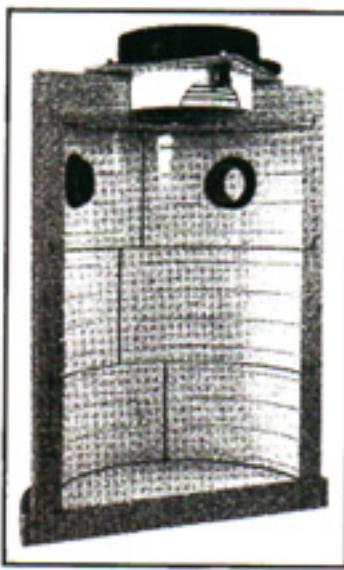


Uncontrolled Drop:  
Solids Separated  
Solids & Liquids Not Carried Away  
H<sub>2</sub>S Emissions High  
High Maintenance  
Access Difficult (multiple inlets must be plugged for work or access to the area below)

Controlled Drop with recliner inside drop bowl  
Easy inspection and cleaning from above  
Erosion of structure eliminated (walls & bench)  
H<sub>2</sub>S Emissions reduced  
Service from street eliminates confined space entry  
Use in wet wells to reduce pump cavitations  
Several sizes in stock; custom sizes available  
Eliminate troublesome outside drops



# DURA PLATE 100 LINER SYSTEM



## Part 1 - General

The Dura Plate 100 Liner is a corrosion protection system for concrete structures used in wastewater and light industrial application. It is a sectional design with compression joints providing easy installation without the need for welding.

## Part 2 - Material

The liner and seals are all formed from materials selected for their chemical resistance properties. The main panel sections are formed from a polymer blend, while the vertical panel joints are sealed with an EPDM rubber, and the horizontal structure joints with an approved preformed butyl sealant.

## Part 3 - Advantages

The Dura Plate 100 Liner System was designed on a three point design philosophy.

1) The system will provide corrosion protection to the concrete substrate, by shielding it with a protective barrier of inert material embedded to the inside wall of the structure. Each panel features a minimum 1/2" return on each edge to ensure proper sealing.

2) The design will minimize the freight cost by using a sectional design that will

## Dura Plate 100 Liner System Corrosion Protection for Concrete Structures

allow the pieces to be nested within each other while being shipped to the precaster.

3) The design will provide easy installation without the need for welding sections together, but still providing complete corrosion protection to the structure.

## Part 4 - Performance

The Dura Plate 100 Liner meets or exceeds all material and test requirements as outlined by the manufacturer.

## Chemical Resistant:

Chemical	Solution
Sulfuric Acid [H <sub>2</sub> SO <sub>4</sub> ]	20%
Sodium Hydroxide [NaOH]	5%
Ammonium Hydroxide [NH <sub>4</sub> OH]	5%
Nitric Acid [HNO <sub>3</sub> ]	1%
Ferric Chloride [FeCl <sub>3</sub> ]	1%
Soap	0.1%
Detergent	0.1%

## Physical Properties of Liner Panel:

Test	ASTM Method	Minimum Value
Tensile	D-638	6,000 psi
Elongation	D-638	2%
Tensile Modulus	D-638	300,000 psi
Flexural Strength	D-790	11,000 psi
Flexural Modulus	D-790	360,000 psi
Tensile Impact	D-1822	30 ft-lbs

## Part 5 - Specifications

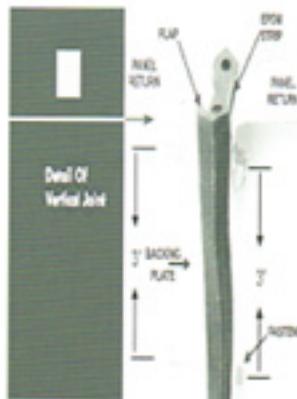
A protective liner shall be used whenever a precast concrete manhole or structure is used in a sanitary or light industrial sewer system in which the potential for corrosive attack to the concrete substrate exists.

The liner shall be the Dura Plate 100 Liner as manufactured by A-LOK® Products, Inc., Tullytown, PA or approved equal.

The design of the liner shall provide a corrosion protective barrier permanently

embedded to the inside wall of the structure. The liner system shall assure that:

- 1) The liner shall become an integrally part of the structure wall by casting the liner with the structure during the manufacturing process. The liner shall also be capable of being cast into a round structure by curving the liner in a manner that allows it to remain permanently attached to the inside structure wall.
- 2) Vertical joints between the liner sections shall be made by the mechanical compression of an EPDM rubber strip between the returns of the two panels with self tapping screws spaced every 3 inches apart.
- 3) Horizontal joints between structure sections shall be sealed with an approved butyl strip compressed between the sections in a manner as recommended by the manufacturer.
- 4) The liner system shall be composed from materials that are corrosion resistant by nature and conforms to the physical and chemical requirements as determined by the manufacturer.
- 5) The liner shall be sized specifically for the type of structure being used and shall be installed in accordance with the recommendations of the manufacturer.



# SANITARY AND STORM WATER OPTIONS

*Scioto Valley Precast Carries an  
Inventory of Manhole Castings*



*We Manufacture Various Risers,  
Grade Rings and Lids*



*Grade Rings*

*Eccentric Cones and Flat Top lids  
Available for Manholes*



*Eccentric Cone*



*Seals and Casting*



*Riser*



*Vinyl Lined Lift Stations*

# 48-60-72 INCH DIAMETER LIFT STATIONS



Septic  
System



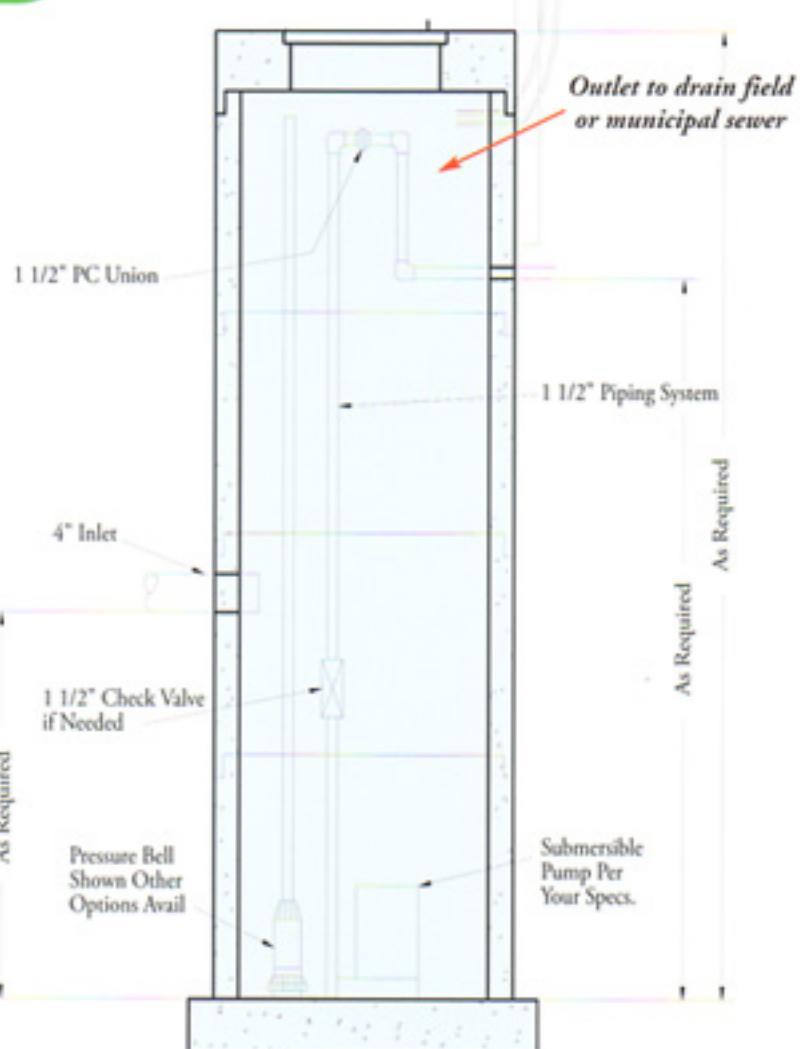
Round  
Lift  
Station



Vacuum Tubing from Pressure  
Bell to Control Panel



Pressure Bell



# LIFT STATION/DOSING TANK



Control Panel

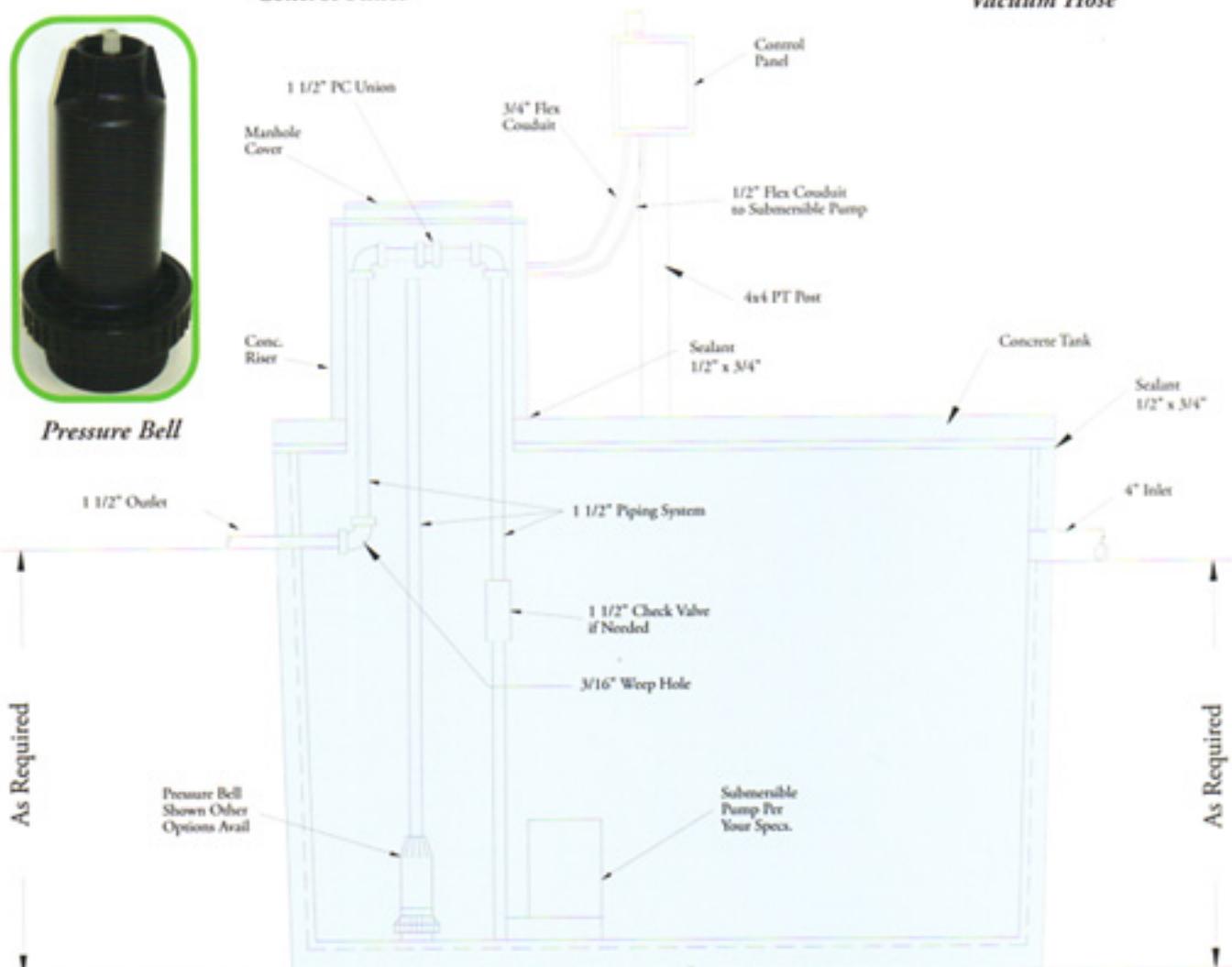
Our Residential lift stations and Dosing Tanks are delivered to your site fully plumbed. All that is needed is power run to the tank and our certified electrician will wire the system ready to run.



Vacuum Hose



Pressure Bell



# 48 INCH DRYWELLS



Recess for Manhole Grate

Flat Top Drywall and  
Manhole Lid

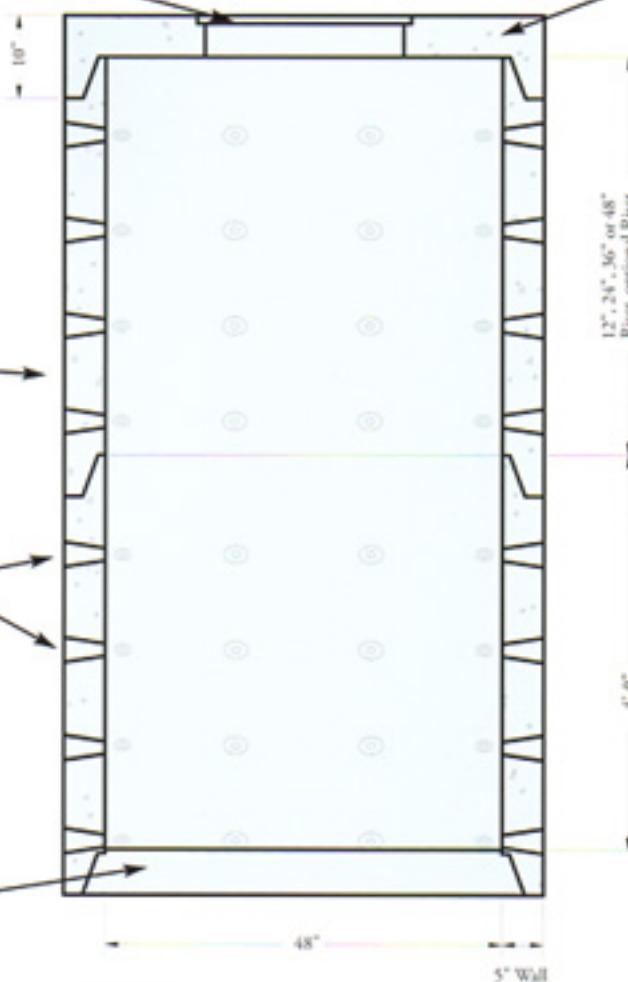
Drywell Sections may be  
stacked to achieve depth  
needed

4 rows with 8 plugs  
per row

6" poured concrete  
bottom, optional

12", 24", 36" or 48"  
Riser, optional Riser  
with or without holes

Traffic Rated  
Drywells Available



# 72 INCH DRYWELLS



Traffic Rated  
Drywells Available

Recess for steel grade

Drywell and manhole lids

Drywell sections may  
be stacked to achieve  
depth needed

4 rows with 8  
plugs per row

6" poured concrete bottom,  
optional

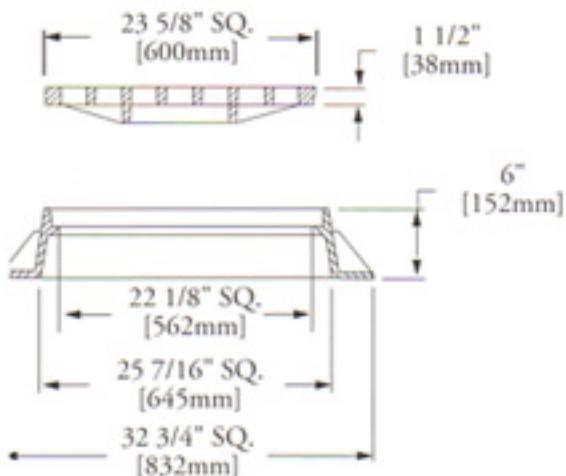
72" Inside Diameter

12", 24", 36" or 48"  
Riser optional Riser  
with or without holes

4'-0"

7" Walls

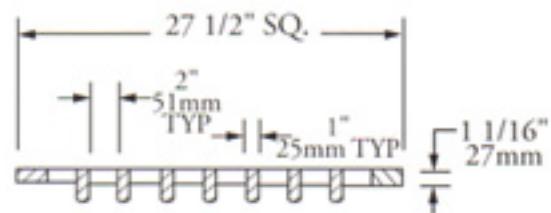
# DRYWELL OPTIONS



## 5250 Catch Basin Inlet

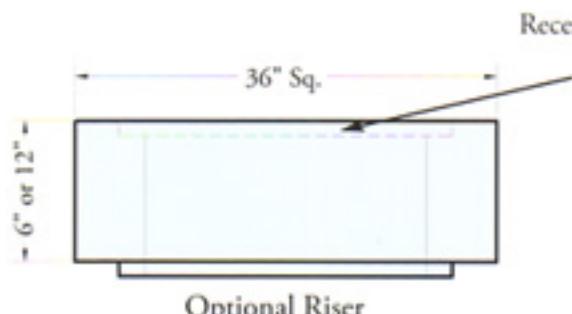
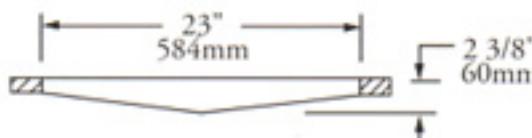
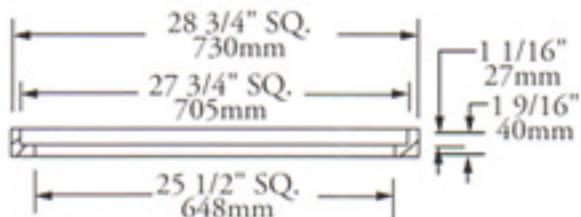
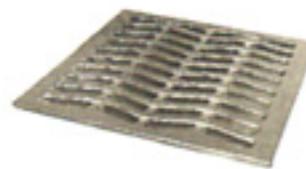
*Heavy Duty*  
*"DUMP NO WASTE!" lettering and fish image.*  
*Approx. 220 sq. in. of opening*  
*300 lb. (138kg) total weight*

*Options:*  
*8" Ht. Frame - 5235*  
*4" Ht. Frame - V-5622*  
*ADA Grate - V-5622-80*  
*Solid Cover - V-6622*

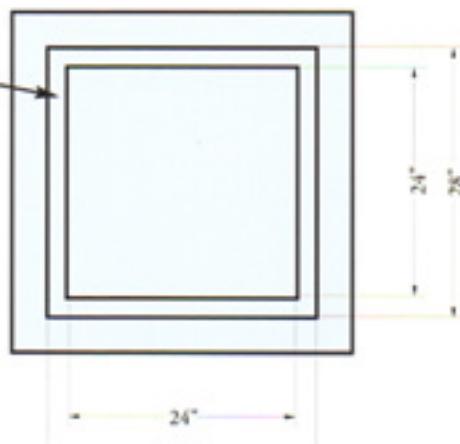


## 5110 Catch Basin Inlet

*TYPE M3 Heavy Duty*  
*Sinusoidal Grate*  
*Approx. 300 sq. in. of opening*  
*"DUMP NO WASTE" Lettering*



Recess for catch basin  
inlet grate



Traffic Rated  
Drywells Available

# OTHER PRODUCTS AVAILABLE



*Septic Systems/  
Aeration Systems*



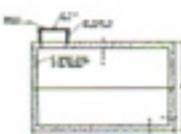
*Catch Basins*



*Highway Dividers*



*Split Box Culverts*



*Water Storage  
Tanks (Cisterns)*



*Lift Stations/  
Dosing Tanks*



*Precast Steps*



*Parking Blocks*



*Lagging*



*Headwalls*



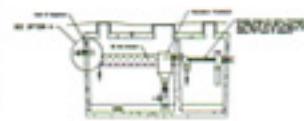
*Stock Watering  
Tanks*



*Bridge/Retaining  
Wall Blocks*



*Bridges*



*Oil & Grease  
Interceptors*



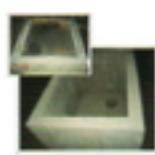
*Chlorinators*



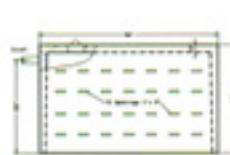
*Distribution &  
Drop Boxes*



*Containment  
Tanks*



*Utility Vaults  
(Electric & Water)*



*Other Drywells*



*Erosion Protection*

## SCIOTO VALLEY PRECAST YOUR ONE STOP PRECAST CENTER

*Septic Tanks 1000, 1500,  
2000, 3000, 4000, 5000  
Gallon*

*Aeration Systems*

*Residential/Commercial*

*Quanics Filter Systems*

*Residential/Commercial*

*Lift Stations / Dosing Tanks*

*Pumps*

*Control Panels*

*MISC. Septic  
System Products*

*Risers/Lids -*

*Concrete & Plastic*

*Distribution Boxes -*

*Concrete & Plastic*

*Drop Boxes -*

*Concrete & Plastic*

*Flow Dividers*

*Chlorinators*

*UV Lamps*

*EZflow Gravel less Leaching*

*Cisterns 1700 Gallon to  
5000 Gallon Tanks*

*Cistern Filters*

*Pond Filters*

*Manholes*

*Catch Basins*

*Stock Watering Tanks*

*Precast Steps*

*Parking Blocks*

*Retaining Wall Blocks*

*Lagging*

*Headwalls*

*Bridges*

*Box Culverts*

*Oil & Grease Interceptors*

*Utility Vaults - Electric &*

*Water*

*Fuel Containment Tanks*

*Drywells - Square/Round -*

*Also Traffic Rated*

*Floor Drains*

*Highway Dividers*

*Erosion Protection*

*Special Project Design and  
Fabrication*

### Commercial Systems Available

*Scioto Valley Precast*

*American Made Products from a Family Owned Company*

*Phone: 740-663-2659 Fax: 740-663-2017*

*[www.sciotovalleyprecast.com](http://www.sciotovalleyprecast.com)*