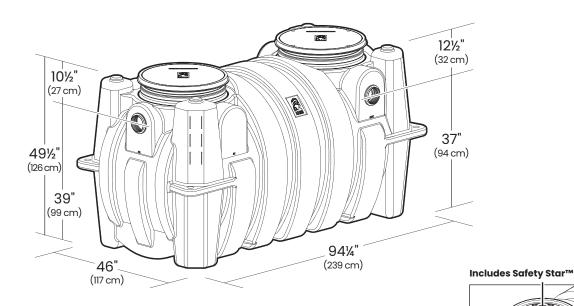
# SPECIFICATION AND SUBMITTAL

SI-500

510 Gallon Kitchen Solids Interceptor for Indoor / Outdoor Use





## **SUBMITTAL**

#### **Standard**

Location: indoor/outdoor Installation: above/below grade Solids Capacity: 457 gal. Flow Rate (4"): 125 GPM (7.9 L/s) Flow Rate (6"): 375 GPM (23.7 L/s)

Liquid Capacity: 510 gal.

Weight: 528 lbs.

Connections: 4" (100 mm) FPT (triple outlet) with 4" (100 mm) Plain End Adapters

Covers: cast iron covers, pickable 24" gas/water tight, H-20 rated, proof-load tested to 40,000 lbs. Access Restrictor: Safety Star™ (450 lb. rating)

built into each cover adapter

### **Options**

- 6" Plain End Inlet/Outlet (straight-through) with Dual Pumpout Port Connections
- AK1: High Water Anchor Kit
- C24H2: composite covers, bolted 24" gas/water tight,
  - traffic load rated for 16,000 lbs.
- CC2: integral membrane clamping collar kit

- AGS2: Above Grade Support
- FCR2 (x2) >4" 34" Field Cut Riser
  FCR2 (x4) >34" 64" Field Cut Risers
- FCR2 (x4) >34 64 Field Cut Risers
  FCR2 (x6) >64" 94" Field Cut Risers
- PP3: Pumpout Port

## **Approval**

Signature:	Date:		Company:
Specifying Engineer:		Engine	ering Firm:



MODEL NUMBER: S1-500 **DESCRIPTION:** 510 Gallon Polyethylene Solids Interceptor

PART #: 5075-001-01 DWG BY: B. Karrer DATE: 4/29/2020 REV: ECO:

9500 Woodend Road | Edwardsville, KS 66111 | 913-951-3300 | schierproducts.com

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## SPECIAL PRECAUTIONS

For Schier Solids Interceptor Installations - Failure to follow this guidance voids your warranty

A v

**WARNING!** DO NOT AIR TEST UNIT OR RISER SYSTEM!

Doing so may result in property damage, personal injury or death.

CAUTION! Do not install this unit in any manner except as described in these instructions.

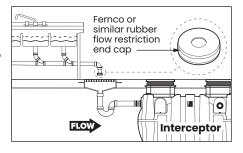
#### **Installation Instructions**

Installation instructions and additional components are included with the interceptor. Read all instructions prior to installation. This interceptor is intended to be installed by a licensed plumber in conformance with all local codes



#### When Installing Interceptor Inside

If your dishwashing sink(s) discharges into a floor drain/sink (drain), you must regulate the flow into the drain to avoid an overflow of water onto the kitchen floor. This can be done by installing a valve or flow restriction cap on the sink piping that discharges into the drain.

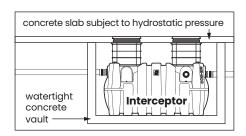


See drawing for guidance. For detailed guidance on indirect connections, go to:

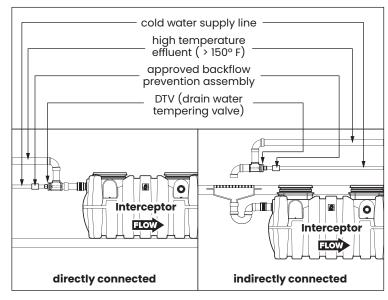
webtools.schierproducts.com/Technical\_Data/Indirect\_Connections.pdf

### Hydrostatic Slabs (or Pressure Slabs)

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.



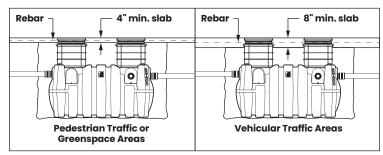
## **High Temperature Kitchen Water**



If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will weaken or deform PVC Schedule 40 pipe, poly drainage fixtures like interceptors and erode the coating of cast iron (leading to eventual failure).

### **Below Grade Installation Slab Requirements**

A concrete slab to finished grade with rebar is required when installing interceptor below grade.





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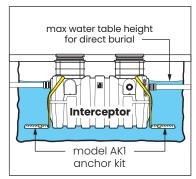
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For Schier Solids Interceptor Installations - Failure to follow this guidance voids your warranty

### **High Water Table Installations**

Interceptors

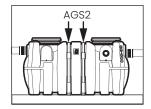
and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor).



At risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water. Billy Goat™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model SI-500 uses model AKI anchor kit.

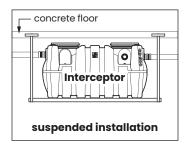
## Above Grade Installation Support (for Model SI-500 Only)

The wet weight of the interceptor combined with high temperature kitchen water creates the potential for tank deformation when installed above grade. Model SI-500 installed above grade must be installed with Above Grade Support Kit model AGS2 to maintain structural integrity



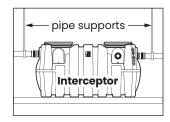
### **Fully Support Base of Unit**

Install unit on solid, level surface in contact with the entire footprint of unit base; for suspended installations design trapeze to support the wet weight of the unit. Do not partially support unit or suspend unit using metal U-channel to create a trapeze.

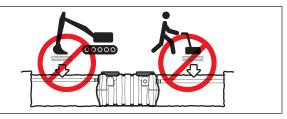


## **Support Inlet and Outlet Piping**

For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.



DO NOT **COMPACT BACKFILL** 





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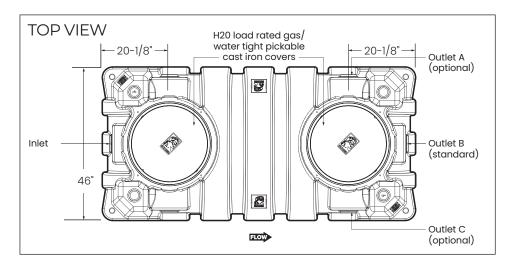
## **SPECIFICATIONS**

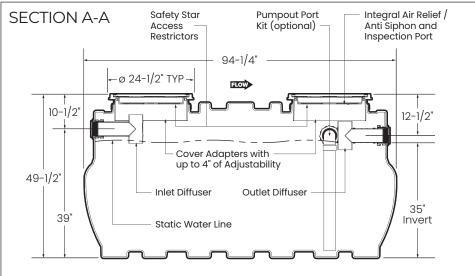
#### **NOTES**

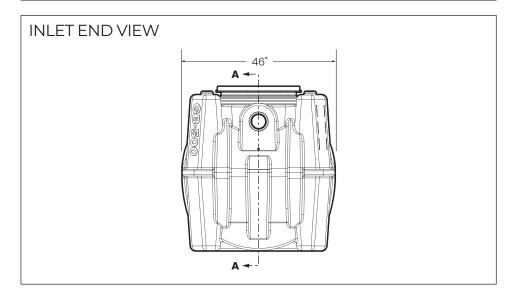
- 1. 4" plain end inlet/outlet
- 2. Unit weight w/cast iron covers: 528 lbs.; w/composite covers: 412 lbs. (For wet weight add 4,254 lbs.)
- **3.** Maximum operating temperature: 150° F continuous
- Capacities Liquid: 510 gal.; Solids: 457 gal.
- 5. For gravity drainage applications only.
- **6.** Do not use for pressure applications.
- Cover placement allows full access to tank for proper maintenance.
- 8. Vent not required unless per local code.
- **9.** Engineered inlet and outlet diffusers are removable to inspect / clean piping.
- **10.** Integral air relief / Anti-siphon / Sampling access.
- Safety Stăr™, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating)

#### **ENGINEER SPECIFICATION GUIDE**

Schier Billy Goat™ solids interceptor model # SI-500 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Interceptor shall be furnished for above or below grade installation with Safety Star access restrictor built into each cover adapter,. Interceptor solids capacity shall be 457 gallons. Interceptor maximum flow rate shall be 200 GPM. Cover shall provide water/ gas-tight seal and have minimum 16,000 lbs. load capacity.









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