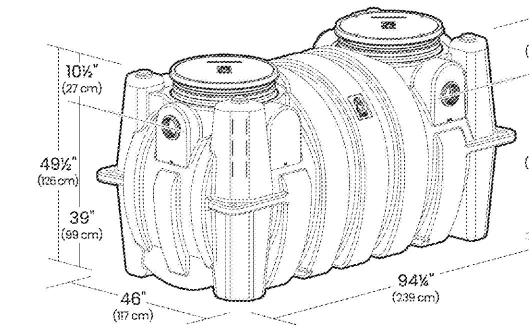
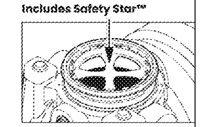
SPECIFICATION AND SUBMITTAL

GB-500 100 GPM Grease Interceptor for Indoor / Outdoor Use





This unit is certified to ASME A112.14.3 (Type C) and CSA B481.1 and includes an internal flow control External flow control with vent not required.

SUBMITTAL

Standard

Location: indoor/outdoor
Installation: above/below grade
Flow Rate: 100 GPM (6.3 L/s)
Grease Capacity: 3,048 lbs. (1,383 kg), 418 gal. (1,583 L)
Solids Capacity: 128 gal. (485 L)
Liquid Capacity: 510 gal. (1,931 L)
Weight: 528 lbs. (239 kg)
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

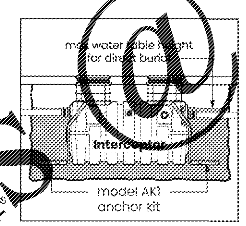
- ☐ 6" Plain End Inlet/Outlet (straight-through) with Dual Pumpout Port Connections
- ☐ 6" Plain End Inlet/Outlet (triple outlet)
- ☐ 6" MPT Inlet/Outlet
- ☐ (stainless steel, straight-through)
- ☐ **-FO** (fixed outlet)
- ☐ **PLAIN-EA-24:** 2" Plain End Fitting
- ☐ **PLAIN-EA-34:** 3" Plain End Fitting
- ☐ **FPT-EA-34:** 4" x 3" FPT Fitting
- ☐ **FPT-EA-23:** 3" x 2" FPT Fitting
- ☐ **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 Risers
- ☐ **FCR2** (x4) >34" – 64" Field Cut Risers
- ☐ **FCR2** (x6) >64" – 94" Field Cut Risers
- ☐ [illegible] Pumpout Port

SPECIAL PRECAUTIONS

For Schier Grease Interceptor Installations – Failure to follow this guidance voids your warranty

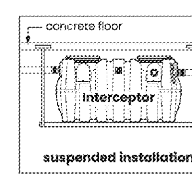
High Water Table Installations

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 or 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. Great Basin™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model GB-500 uses model AK1 anchor kit.



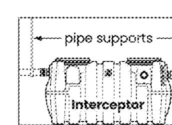
Fully Support Base of Unit

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.



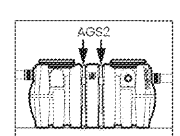
Support Inlet and Outlet Piping

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.

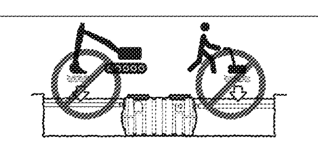


Above Grade Installation Support (for Model GB-500 Only)

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

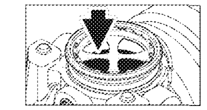


DO NOT COMPACT BACKFILL



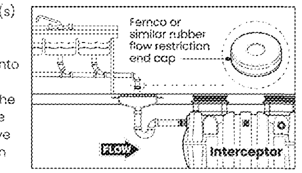
Installation Instructions

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.



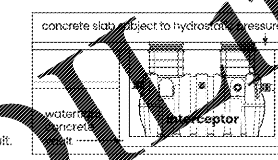
When Installing Interceptor Inside

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

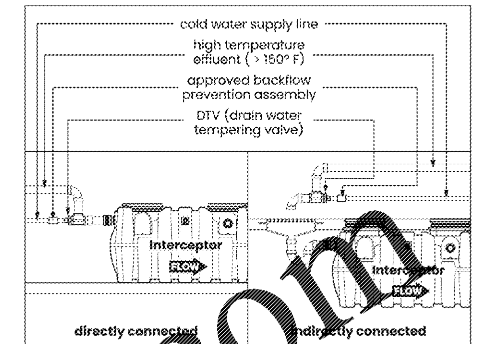


Hydrostatic Slabs (or Pressure Slabs)

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.



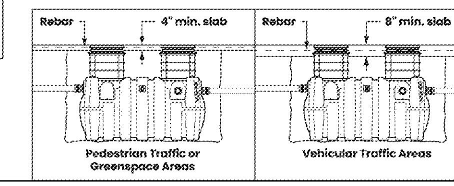
High Temperature Kitchen Water



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.



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
4. Capacities - Liquid: 510 gal., Grease: 3,048 lbs. Solids. 128 gal.
5. Built-in Flow control. For series installations, only install flow control on the first unit in the series if necessary.
6. For gravity drainage applications only.
7. Do not use for pressure applications.
8. Cover placement allows full access to tank for proper maintenance.
9. Vent not required unless per local code.
10. Engineered inlet and outlet diffusers are removable to inspect / clean piping.
11. Integral air relief / Anti-siphon / Sampling access.
12. Fixed outlet models (-FO) have inlet and outlet permanently welded at the factory in the straight-through (B) positions.
13. Safety Star™, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating)

DIFFUSION FLOW TECHNOLOGY

The inlet diffuser reduces turbulence, creates laminar flow and allows the entire tank volume to be utilized for efficient grease separation and minimal disturbance to existing grease and sediment layers. The integral air relief / anti-siphon at the outlet diffuser top allows pressure stabilization within the unit during operation. The outlet diffuser can easily be attached to any of the three outlets provided to ease job site piping layouts.

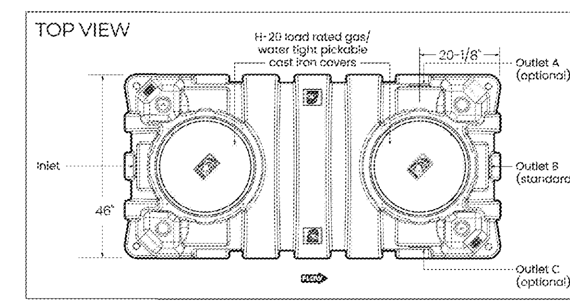
ENGINEER SPECIFICATION GUIDE

Schier Great Basin™ grease interceptor model # GB-500 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Flow control cartridge shall be PVC. Interceptor shall be furnished for above or below grade installation. Interceptor shall be certified to ASME A112.14.3 (type C) and CSA B481.1, with field adjustable riser system, Safety Star access restrictor built into each cover adapter, built-in flow control and three outlet options Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 3,048 lbs. Cover shall provide water/ gas-tight seal and have minimum 16,000 lbs. load capacity.

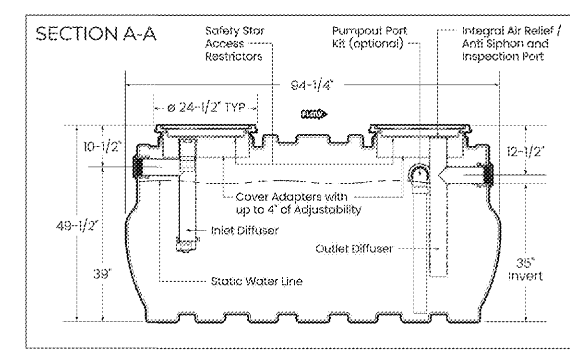
CERTIFIED PERFORMANCE

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.

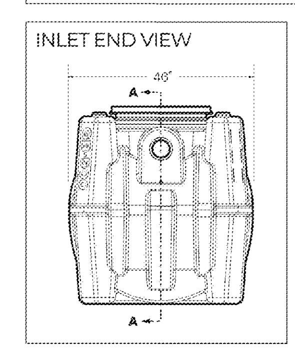
TOP VIEW



SECTION A-A



INLET END VIEW



Rated Grease Capacities for Units Piped in Series

No. of Units in Series	Removal Efficiency
	100 GPM
	95.3%
2	6,096 lbs.
3	9,144 lbs.
4	12,192 lbs.

OWNERS:
ESTEL DEVELOPMENT LLC
763 NE 193RD TERRACE
MIAMI, FL 33179

DATE 8-14-20	DRAWN BY:	SCALE
NO.	DATE	REVISION

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REGISTRATION NO. AA 0002786

SEAL
PAUL R. GERSHEN
STATE OF FLORIDA
REGISTERED ARCHITECT
0010943

PROJECT LOCATION
ESTEL PLAZA
2890-2894 WEST BROWARD BLVD
FT LAUDERDALE, FLORIDA 33312

SHEET TITLE
GREASE TRAP SPECS

SHEET NO. P1.1

JOB NO. 2020-002