GB-20

Great Basin™ High Efficiency Grease Interceptor Technical Data
Submittal | Special Precautions | Specifications | Installation | Application Specific Details

SUBMITTAL

STANDARD: 2" plain end inlet/outlet | Capacities - Liquid: 22 gal. (83.1 L); Grease: 109 lbs. (49.5 kg)/16 gal. (56.7 L); Solids: 6.4 gal. (24.1 L)
Light Duty, bolted, gas/water tight polyethylene covers. (450 lbs. when direct buried, 2500 lbs. when using the SR-16 Riser)

OPTIONS:
- 2" Male Thread Inlet/Outlet
- 3" Plain End Inlet/Outlet
- 3" Male Thread Inlet/Outlet
- Pumpout Port (Small)
- TeleGlide Risers
  - SR16 >2-1/8" – 16"
  - CC16 >2-1/8" – 16” with Integrated Membrane Clamping Collar Kit

APPROVAL:

Signature:
Date:
Company:
Specifying Engineer:
Engineering Firm:

MODEL NUMBER: GB-20
DESCRIPTION: Polyethylene Grease Interceptor
20 GPM - 22 gallon capacity

PART #: GB-20
DWG BY: C. O’Boyle
DATE: 10/08/2015
REV: 2
ECO:
Installation Instructions

Installation instructions and additional components are located inside 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.

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. Failure to follow this guidance voids your warranty.

High Temperature Kitchen Water

If water is entering the interceptor at excessive temperature (over 140°F), a drain water tempering valve (DTV) must be installed. Most state and local plumbing codes prohibit water above 140°F being discharged into the sanitary sewer. Water above 140°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). 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. Failure to follow this guidance voids your warranty. Models GB-50, GB-75, and GB-250 that are direct buried in high water table scenarios must be installed with model AK1 anchor kit or warranty is void.
NOTES
1. 2’ plain end inlet/outlet
2. Unit weight - w/standard covers: 31 lbs. (wet weight 215 lbs)
3. Maximum operating temperature: 140º F continuous
5. Built-in Flow control.
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.

DIFFUSION FLOW TECHNOLOGY
The inlet diffuser splits influent into three paths, creating laminar flow and utilizing the entire liquid volume of the tank for efficient grease separation. The calibrated openings greatly reduce effluent turbulence. The effluent enters the main chamber without disturbing the existing grease or sediment layers. The integral air relief / anti-siphon in the top of the outlet diffuser allows pressure stabilization within the unit during operation. The bottom of the outlet diffuser allows only effluent which is free of grease to exit the tank. It can easily be attached to any of the three outlets provided to ease jobsite piping layouts.

ENGINEER SPECIFICATION GUIDE
Schier Great Basin™ grease interceptor model # GB-20 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. 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, built-in flow control, built-in test caps and three outlet options. Interceptor flow rate shall be 20 GPM. Interceptor grease capacity shall be 109 lbs. Cover shall provide water/gas-tight seal and have minimum 450 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.

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LEAK/SEAL TESTING
Cap/plug all base unit plumbing connections and remove covers. For base unit testing, fill with water to just above the highest connection. For riser system testing (if required) fill with water to finished grade level. CAUTION: Risers must be supported before filling with water to prevent tipping. Filled risers will be heavy. Inspect unit, connections and all gaskets and clamps (if applicable) for leaks. Check water level at specific time intervals per local code.

GENERAL INSTALLATION INSTRUCTIONS
Schier grease interceptors are rated and manufactured with an internal flow control system. They do not require an external flow control system or air intake vent. Schier grease interceptors are not to be installed in any other manner except as shown. Consult local codes for separate trapping/venting requirements, cleanout locations and additional installation instructions.

1. The flow control plate is installed on this unit. When the unit is installed in a low flow/low head pressure condition (with a flow rate below 20 GPM), the flow control plate may be removed. Consult a Schier Representative before removing flow plate.
2. Set unit on level solid surface as close as possible to fixtures being served.
3. Connect outlet diffuser to the desired outlet (A,B,C). Unit is shipped with the outlet diffuser in location B and sealing caps on locations A and C.
4. Connect inlet and outlet drainage lines to unit. Mechanically couple pipes to unit. Do not solvent weld.

NOTE: Do not install below a hydrostatic slab.

INTERIOR BELOW GRADE INSTALLATION INSTRUCTIONS

EXCAVATION
1. Install unit(s) as close as possible to fixtures being serviced.
2. Width and length of excavation shall be a minimum of 6” greater than the tank on all sides and depth shall be 6” deeper than tank bottom.
3. Set the tank level on a 6” deep layer of well-packed crushed aggregate material (approximately 3/4” size rock or sand with no fines) and connect waste piping per General Installation Instructions.

BACKFILL
1. Preparation of sub grade per geotech recommendations.
2. Stabilize and compact sub grade to 95% proctor.
3. Fill unit with water before backfilling to stabilize unit and prevent float-out during backfilling. Secure covers and risers (if necessary) to the unit.
4. Backfill evenly around tank using crushed aggregate (approximately 3/4” size rock or sand, with no fines). Do not compact backfill around unit.

FINISHED CONCRETE SLAB
Slab must extend 18” minimum outside the unit footprint.
Pedestrian traffic or greenspace areas: 4” Thick reinforced concrete slab required.
Do not install in vehicular traffic areas.
TELEGLIDE RISER (16 SERIES)
INSTALLATION GUIDELINES

Tools needed: Silver marker (included), tape measure, and Phillips head screwdriver. Jigsaw, circular saw or reciprocating saw will be needed if risers need to be cut.

Riser Assembly Instructions/Steps

1. If unit is to be buried, you will need an SR16 Riser Kit (sold separately). The 16 Series TeleGlide Riser System for these models allows riser heights from 2-1/8” above standard unit up to 16”. Only ONE riser may be used per base unit to allow for sufficient access to internal serviceable components.

2. If more than 16” of riser height is needed, you will need to adjust jobsite requirements OR purchase the next available model with a 24 Series TeleGlide Riser System which allows for taller riser heights.

3. Once unit is set so that pipe connections line up with jobsite piping, remove cover from the unit. Fasten yellow gasketed SR16 mounting ring to unit with hardware provided in separate riser kit. Ring flange with 4 bolt notches faces down against the unit.

4. Push riser into ring until it stops (about 1 inch).

5. Measure the distance from the top edge of the riser down to the finished floor. Make sure to account for any future tile work in your measurement.

6. Remove the riser from the ring. Take measurements from step 5 and measure from the BOTTOM of the riser upwards towards the top of the riser. Mark a line around the riser at this level and cut with a handsaw, jigsaw, or reciprocating saw. Remove debris from the cutting edge with a scraper, utility knife, or leather gloves.

7. Place the cut riser back into the ring on the unit until it stops. Do not add any form of lubricant to riser tube during installation. Fasten cover from unit onto the top of the riser with the same four bolts that were connecting it to the top of the unit. Unit is ready to be water tested and backfilled. Install finished floor.
**APPLICATION SPECIFIC DETAILS**

Inside a Corroded Concrete Unit

- Must be fully supported

Basement Installation with Remote Pump-out

- Vent must terminate above the top rim of the sink
- Kitchen Floor
- Add this vent if unit is installed one or more floors below the fixtures being served

Recessed and Suspended

- Flow ➡

Additional Venting for Floor-Below Installations

- Flow ➡