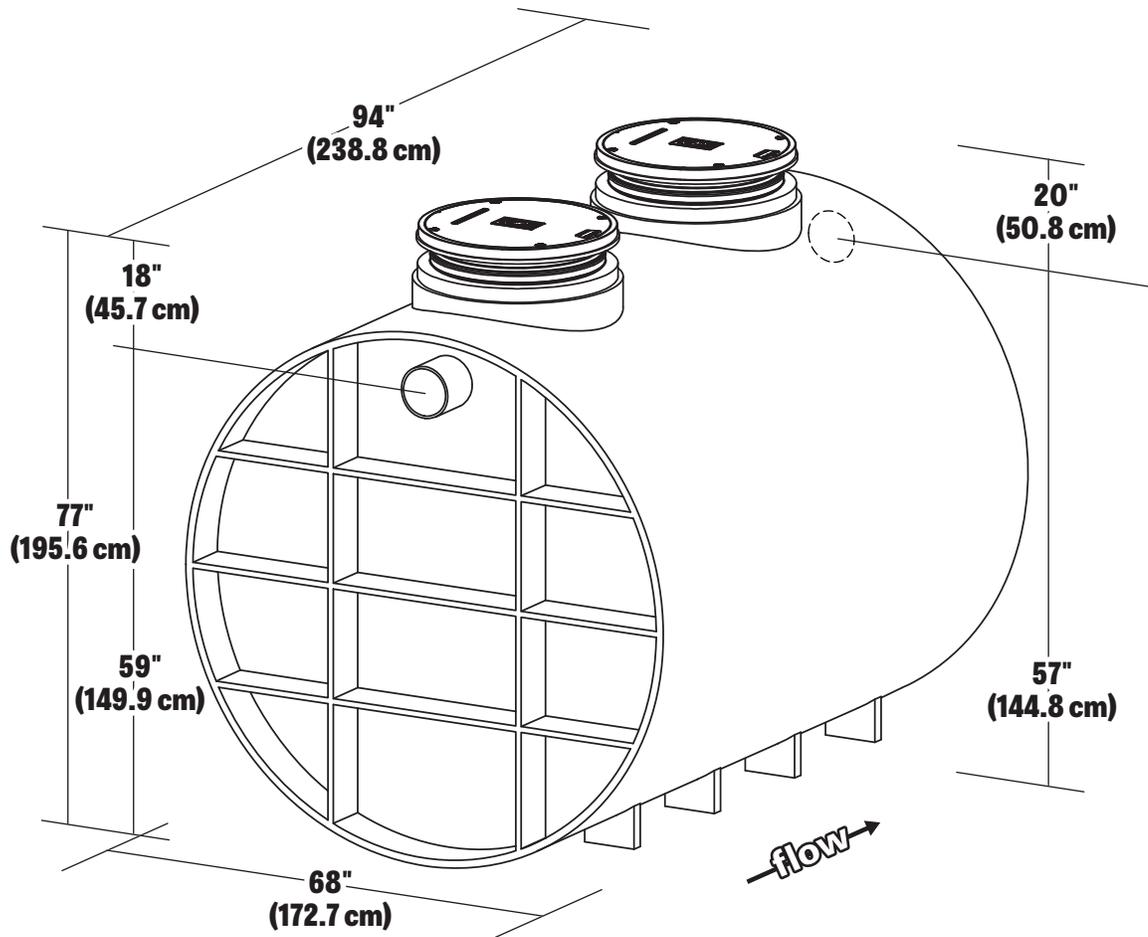


GGI-1000

BigFoot™ Gravity Grease Interceptor Technical Data

Submittal | Special Precautions | Specifications | Installation



SUBMITTAL

STANDARD: 6" plain end inlet/outlet | Capacities - Liquid: 1,010 gal. (3,823.3 L); Grease: 1,080 lbs. (489.9 kg)(150 gal./568 L); Solids: 100 gal. (378.5 L) Highway traffic load rated, bolted, gas/water tight composite covers. (16,000 lbs.)

OPTIONS:

- H2O Load Rated Pickable Cast Iron Covers
- 4" Plain End Inlet/Outlet
- 4" Male Thread Inlet/Outlet
- 6" Male Thread Inlet/Outlet

Field Cut Risers

- SR24** (x2) 5" - 23"
- LR24** (x2) >23" - 38"
- SR24** (x4) >38" - 43"
- SR24** (x2) + **LR24** (x2) >43" - 58"
- LR24** (x4) >58" - 72"

APPROVAL:

This product is made-to-order and is not returnable.
This product is for below grade installations only.

Signature:

Date:

Company:

Specifying Engineer:

Engineering Firm:



SCHIER
LIFETIME GUARANTEED
GREASE INTERCEPTORS

MODEL NUMBER:
GGI-1000

DESCRIPTION: Polyethylene Gravity Grease Interceptor
314 GPM - 1,000 gallon capacity

PART #: 4360-001-04

DWG BY: B. Karrer

DATE: 10/08/2015

REV: 6 03/23/2018

ECO:

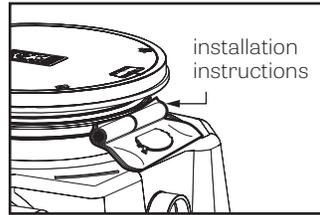


SPECIAL PRECAUTIONS

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

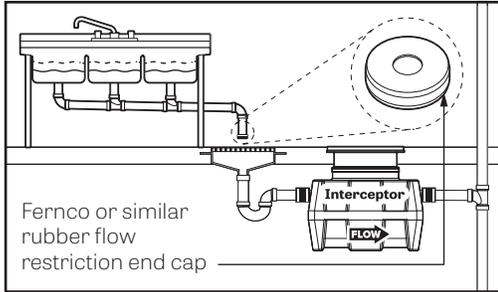
Installation Instructions

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

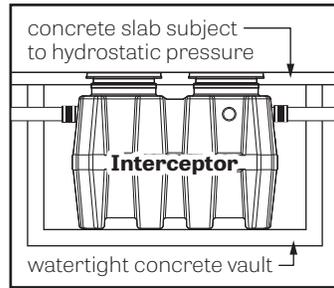
If your dishwashing sink(s) discharges into a floor drain/sink (drain), you must regulate the flow into the drain to avoid an overflow of water onto the kitchen floor. This can be done by installing a valve or flow restriction cap on the sink piping that discharges into the drain. See drawing above for guidance. For detailed guidance on indirect connections, go to:



http://webtools.schierproducts.com/Technical_Data/Indirect_Connections.pdf

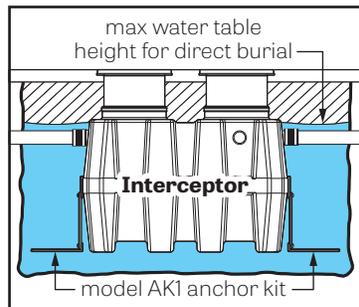
Hydrostatic Slabs (or Pressure Slabs)

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 Water Table Installations

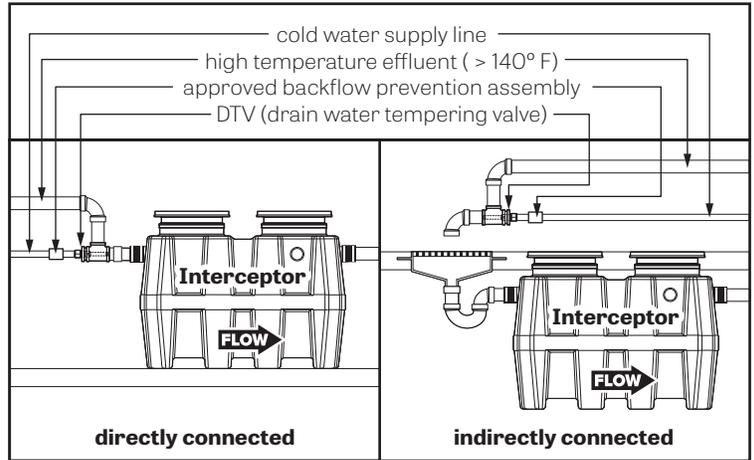
Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable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



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.

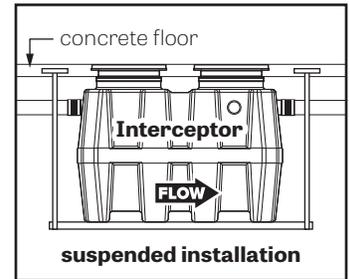
High Temperature Kitchen Water

If water is entering the interceptor at excessive temperature (over 140° F), a drain water tempering valve (DTV) and approved backflow prevention assembly 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).



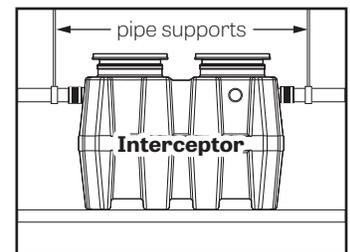
Fully Support Base of Unit

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.



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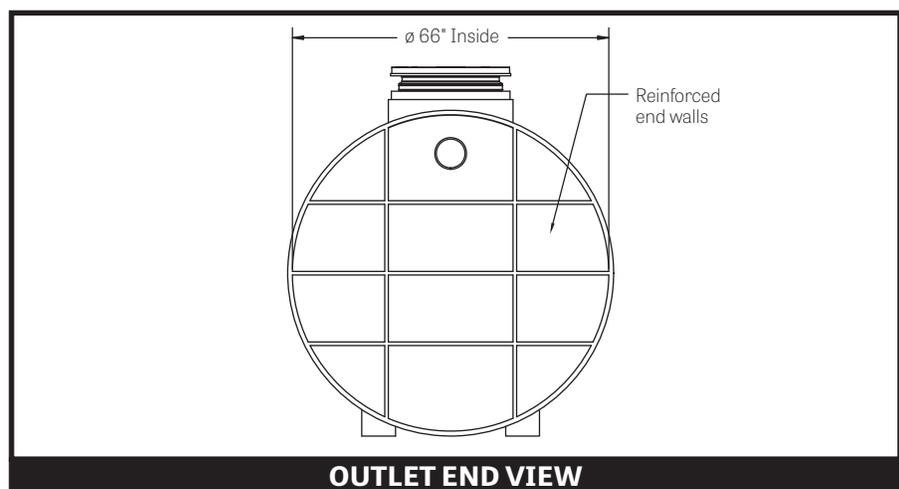
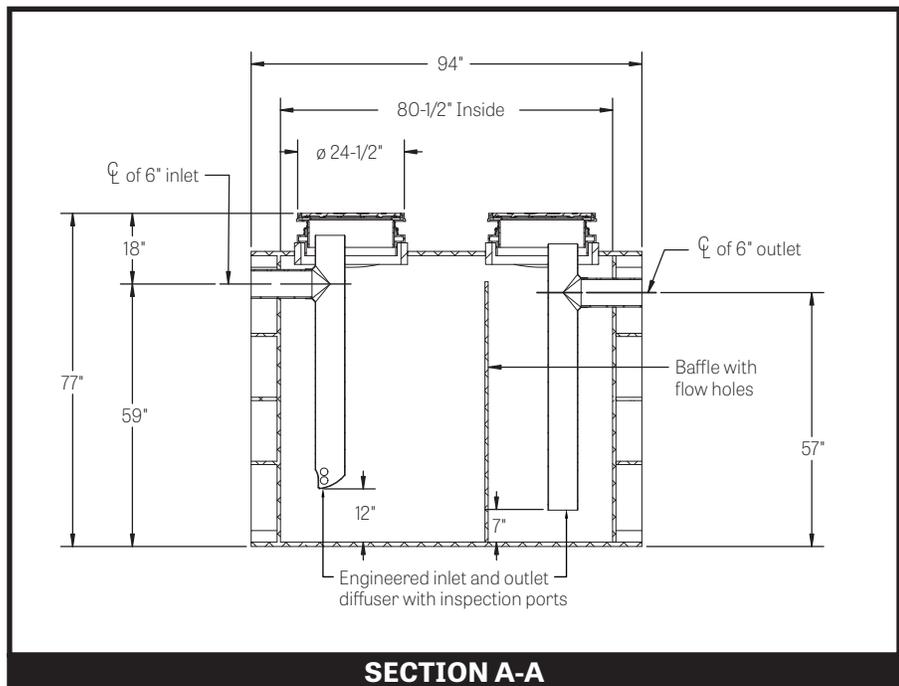
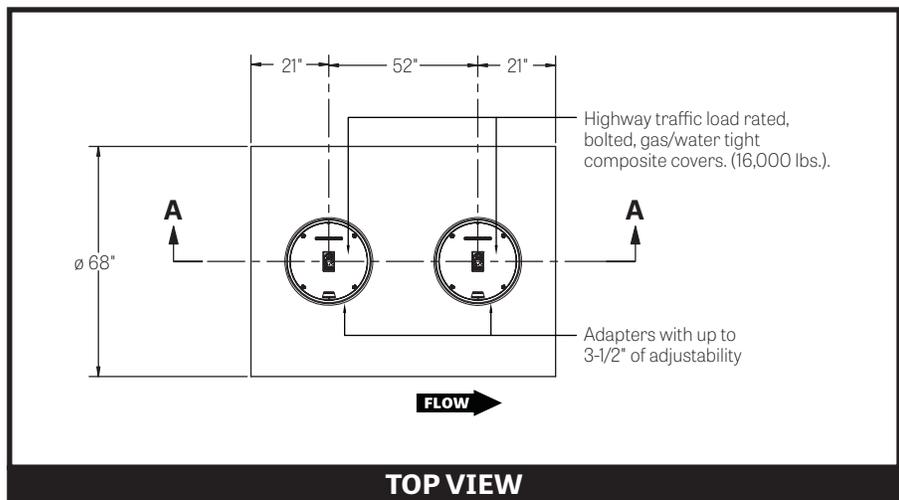
SPECIFICATIONS

NOTES

1. 6" plain end SCH. 40 inlet/outlet
2. Unit weight - w/composite covers: 1,400 lbs.; w/cast iron covers: 1,560 lbs.
3. Maximum operating temperature: 140° F continuous
4. Capacities - Liquid: 1,010 gal.; Grease: 1,080 lbs. (150 gal.); Solids: 100 gal. Capacities are based off the 25% pump-out rule with 60% being grease and 40% being solids.

ENGINEER SPECIFICATION GUIDE

Schier Big Foot™ grease interceptor model # GB-1000 shall be lifetime guaranteed and made in USA of seamless, molded high density polyethylene with minimum 3/4" uniform wall thickness. Interceptor shall be furnished for below grade installation with field adjustable riser system. Interceptor flow rate shall be 314 GPM. Interceptor grease capacity shall be 1,080 lbs. Cover shall provide water/-gas-tight seal and have minimum 16,000 lbs. load capacity.



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INSTALLATION (1 of 2)

WARNING! DO NOT AIR TEST UNIT OR FIELD CUT RISER SYSTEM! DOING SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. BELOW GRADE INSTALLATION ONLY! DO NOT INSTALL ABOVE GRADE!

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.** Inspect unit, connections and all gaskets and clamps (if applicable) for leaks. Check water level at specific time intervals per local code. **NOTE: All GB series tanks have been wet tested for leaks prior to shipment from the factory.**

EXCAVATION

1. Install unit as close as possible to fixtures being served.
2. Surrounding soil must be undisturbed soil or well compacted engineering fill.
3. Width and length of excavation shall be a minimum of 18" greater than the tank on all sides and depth shall be 12" deeper than tank bottom.
4. Set the tank level on a 12" deep layer of well-packed crushed aggregate material and connect waste piping per General Installation Instructions.

INSTALLATION

Schier grease interceptors are 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 requirements, cleanout locations and additional installation instructions.

1. The **flow control plate is not pre-installed** on this unit and is provided in a bag fastened to the neck of the unit. When the unit is installed 13 feet or more below the fixtures being served, or a high flow/increased head pressure condition exists (causing a flow rate above 100 GPM), install the inlet diffuser flow control plate to maintain proper flow rate.
2. Lower and center the unit into hole using straps around unit. Do not use chains or accessways to move the unit. Ensure the unit tops are level with finished grade.
3. Connect inlet and outlet drainage lines to unit. Mechanically couple pipes to unit. **Do not solvent weld.**
4. Secure covers and risers (if necessary) to the unit. For unit with cast iron covers, remove retainer clips prior to burial.

NOTE: Do not install below a hydrostatic slab.

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), or flowable fill. **Do not compact backfill around unit.** Work backfill under the unit using a probe to ensure the unit is fully supported.

FINISHED CONCRETE SLAB

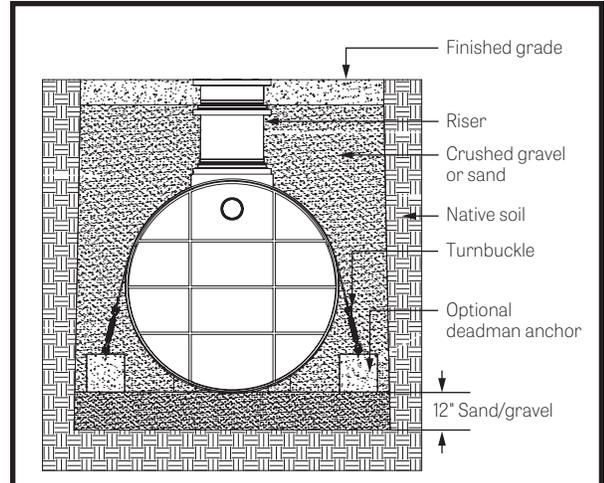
Slab must extend 18" minimum outside the footprint of the unit.

Pedestrian traffic or greenspace areas: 4" Thick reinforced concrete slab required.

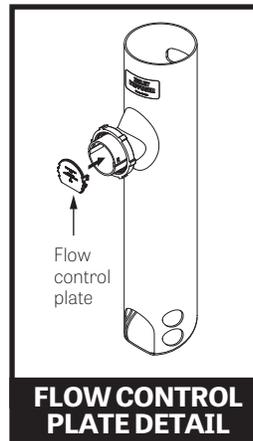
Vehicular traffic areas: Minimum 8" Thick concrete slab with rebar required. Thickness of concrete around cover to be determined by specifying engineer. If traffic loading is required the concrete slab dimensions shown are for guideline purposes only. Concrete to be 28 day compressive strength to 4,000 PSI. Use NO. 4 rebar (ϕ 1/2") grade 60 steel per ASTM A615; connected with tie wire. Rebar to be 2-1/2" from edge of concrete and spaced in a 12" grid with 4" spacing around access openings.

DEADMEN ANCHORING:

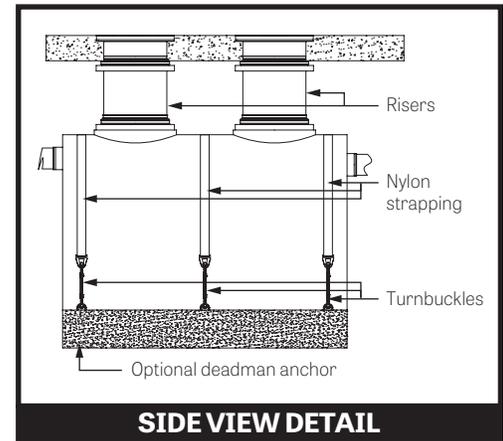
1. Deadmen anchors (by others) for high water table installation should be constructed according to the American Concrete Institute (ACI) code at a size of 12" W x 12" H x 90" L.
2. Deadmen should have 3 anchor points with corrosion resistant turnbuckles (by others) rated for a minimum load capacity of 7,500 lbs.
3. Lay the deadmen parallel with the unit and ensure that it is outside the shadow of the tank.
4. Connect nylon strapping (by others) to each anchor point. Nylon straps must have a minimum load capacity of 7,500 lbs.



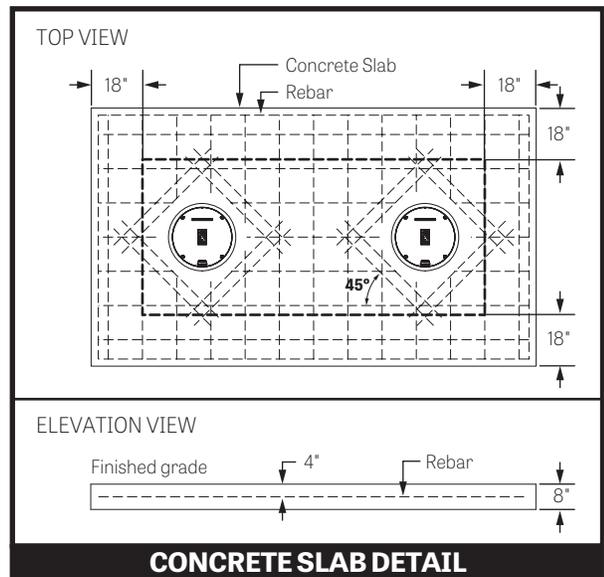
EXCAVATION AND BACKFILL DETAIL



FLOW CONTROL PLATE DETAIL



SIDE VIEW DETAIL



CONCRETE SLAB DETAIL



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INSTALLATION (2 of 2)

FIELD CUT RISER (24 SERIES) INSTALLATION GUIDELINES

Tools needed: 7/16" Nut driver tool/bit (included), marker (included), tape measure and drill with 1/2" chuck. Jigsaw, circular saw or reciprocating saw will be needed if risers need to be cut.

NOTE: To remove a component or adjust its position, the Upper Band Clamp needs to be loosened or removed using nut driver bit. **The Lower Band Clamp is factory set and should not be removed.** For proper fastening ensure clamps are tightened to 5 - 8 ft lbs. of torque (same as a rubber no-hub coupling) prior to installation.

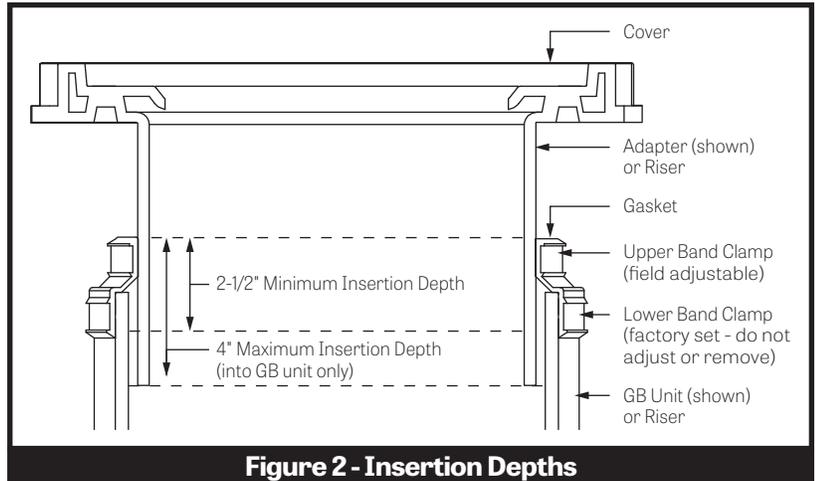
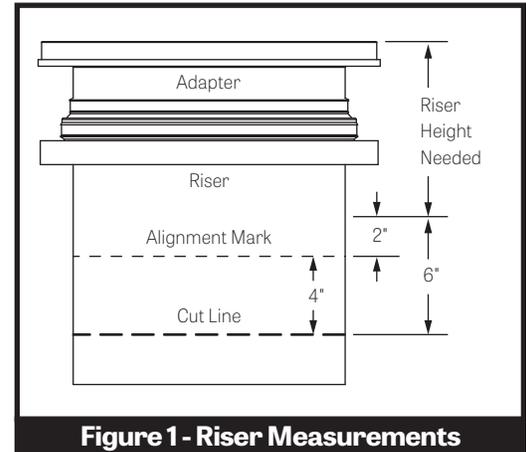
Riser Assembly Instructions/Steps

- Set unit so the pipe connections line up with job site piping and measure riser height needed from top of cover to finished grade. See Table 1 to select risers needed.
- Remove covers from adapters. Remove adapters from main unit. On a level surface, pre-assemble the risers and adapters, adjusting the components upwards or downwards to achieve the riser height needed. Make sure to maintain minimum and maximum insertion depths as shown in Figure 2. If components are too long, make a circular line around the sidewall with marker and cut with a power saw. The lowest cut line on the riser assembly will be 6" beyond the riser height needed to allow for ideal insertion depth (See Figure 1). An alignment mark should be drawn 2" beyond the riser height needed which will align with the top of the base unit gasket. **DO NOT** cut the alignment mark. The Adapters and risers should sit level with each other. Tighten upper clamps to keep riser/adaptor assembly from shifting. Make alignment marks on the sidewalls at the top of all riser gaskets to aid final assembly.
- IMPORTANT:** Before the next step, make sure both diffusers are installed inside the main unit at the appropriate locations. Check if there needs to be any flow control adjustment at the inlet diffuser (see general installation instructions).
- Take apart riser assembly and clean all sidewalls and insides of gaskets to remove dust/debris. Install components into the main units starting from the lowest riser and work your way up to finished grade. Ensure that riser will not interfere with diffuser, allow min. 1" clearance. Maintain minimum and maximum insertion depths for all components (see Figure 2). Tighten Upper Clamps to specified torque after correctly positioning components. Riser assembly may need to be supported during backfill.
- If tilting of the adapter is required to be flush with grade, do so **AFTER** all clamps have been tightened with riser(s)/adapter in a vertical and level position. Tilting is done using gasket flexibility. Tilting before tightening clamps may ruin a perfect gasket seal. Schier recommends tilting only the adapter versus the entire riser assembly to make sure your riser height and proper tank access is maintained.
- If riser height conditions change after completing above steps, there may be room for adjustment. As long as minimum and maximum insertion depths are maintained (see Figure 2), the adapters/risers can be adjusted/cut as many times as necessary. When riser system installation is complete, see Leak/Seal Testing procedure if required.



Table 1

Riser Height Needed	Risers Required
0 - 3-1/2"	None (use adapter)
5" - 23"	SR24 (x2)
>23" - 38"	LR24 (x2)
>38" - 43"	SR24 (x4)
>43" - 58"	SR24 (x2) + LR24 (x2)
>58" - 72"	LR24 (x4)



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