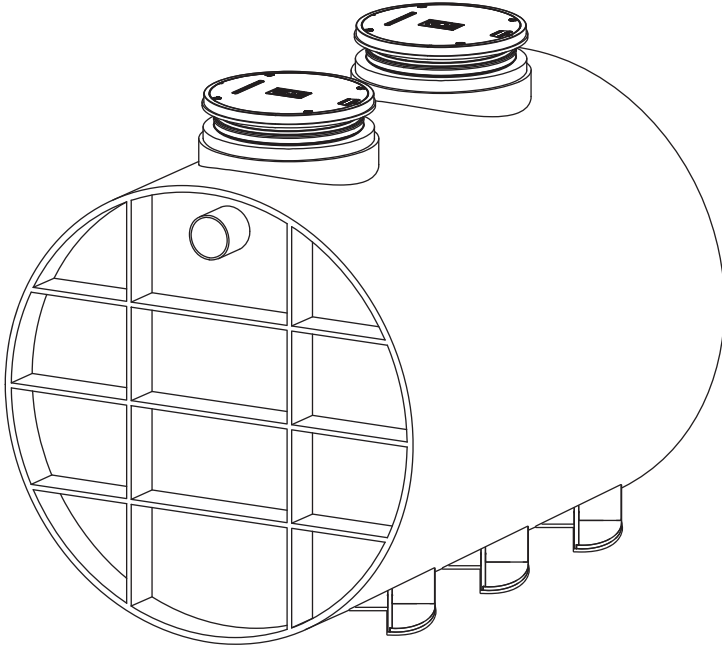

INSTALLATION GUIDE

GB-1000 100 GPM Great Basin™ Indoor/Outdoor Grease Interceptor



Contents

Special Precautions	2-3
Installation Instructions	4-8
Series Installations	9

Part #: 4080-002-01

Find these instructions online at: schierproducts.com/gb-1000



SCHIER



SPECIAL PRECAUTIONS

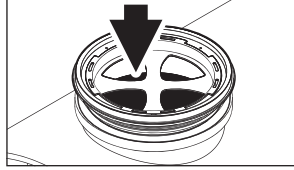
For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

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.

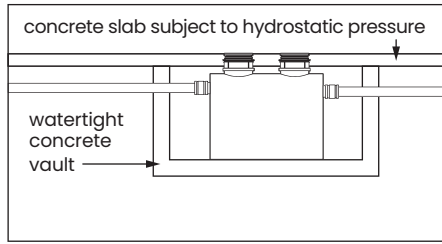
Installation Instructions

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.



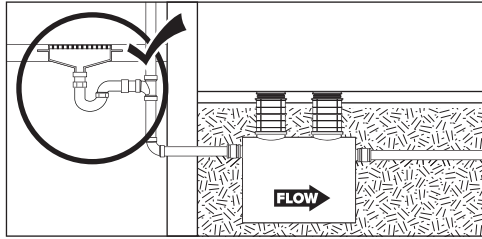
Hydrostatic/ Pressure Slabs

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.

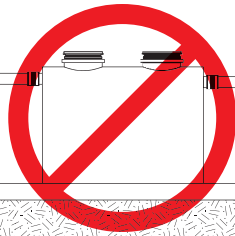


ODOR ALERT!

Interceptor is not a sewer gas trap. All upstream fixtures must be trapped.

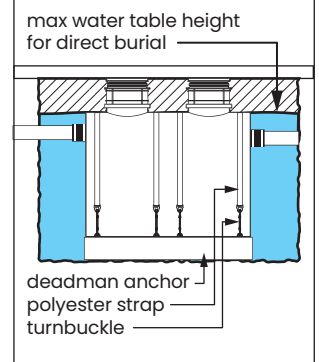


DO NOT INSTALL ABOVE GRADE



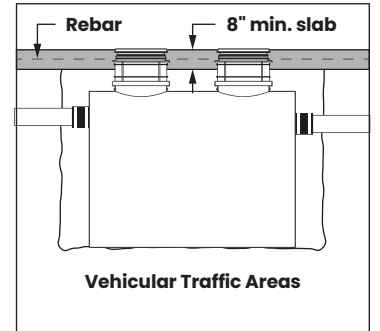
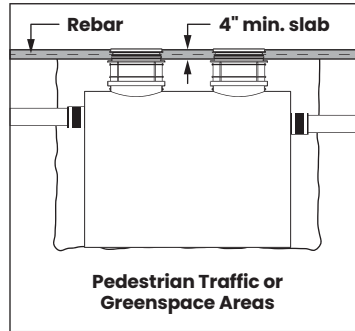
High Water Table Installations

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. Great Basin™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model GB-1000 uses model AK3 anchor kit for use with deadmen anchors.



Below Grade Installation Slab Requirements

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





SPECIAL PRECAUTIONS

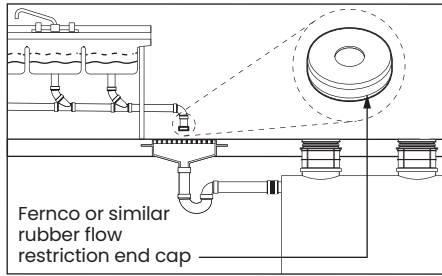
For Schier Grease Interceptor Installations – Failure to follow this guidance voids your warranty

Indirect Connections

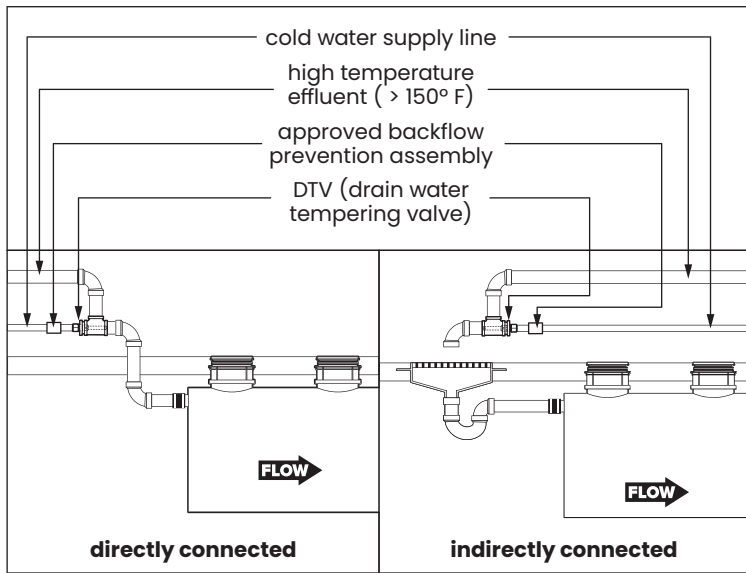
If your dishwashing sink(s) discharges into a floor drain/sink (drain), you must regulate the flow into the drain to avoid an overflow of water onto the kitchen floor. This can be done by

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



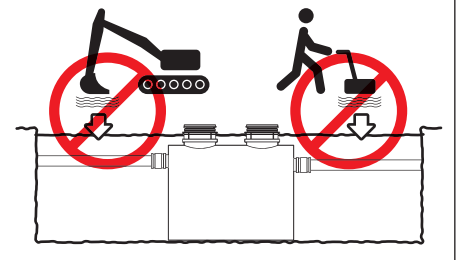
High Temperature Kitchen Water



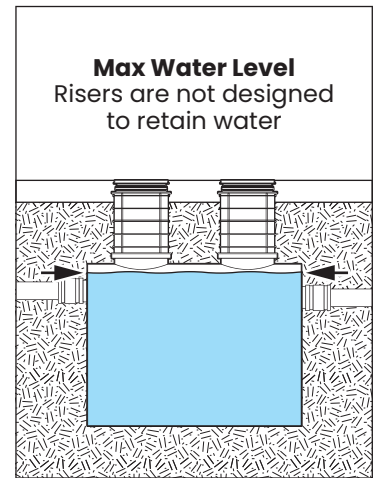
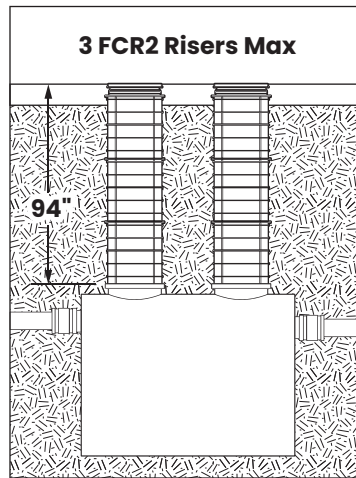
If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will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

DO NOT COMPACT BACKFILL MECHANICALLY

Compact by hand only

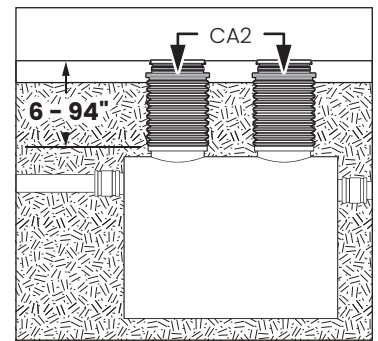


Installations with Risers

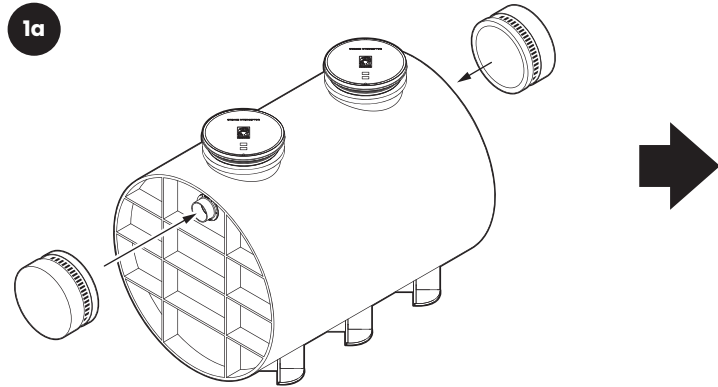


Corrugated Riser Pipe Requirements

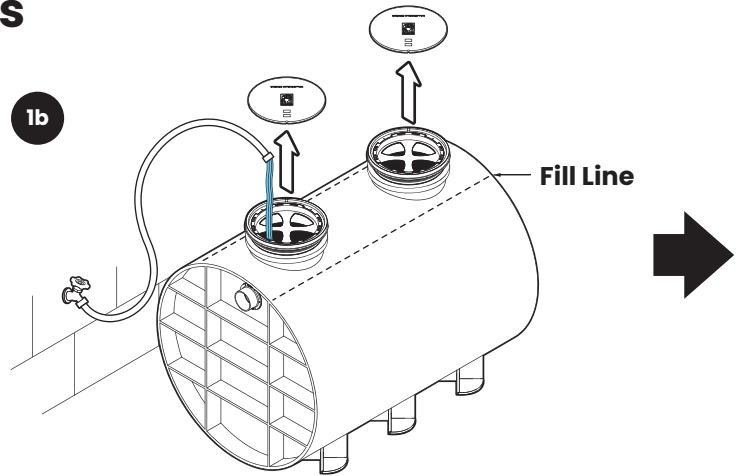
Riser adapter model CA2 must be used when installing interceptors using 24" diameter corrugated pipe as a riser. This will adequately embed the cover adapter in the concrete slab, preventing cover/cover adapter failure under traffic rated loads.



1 Test Tank for Water Tightness

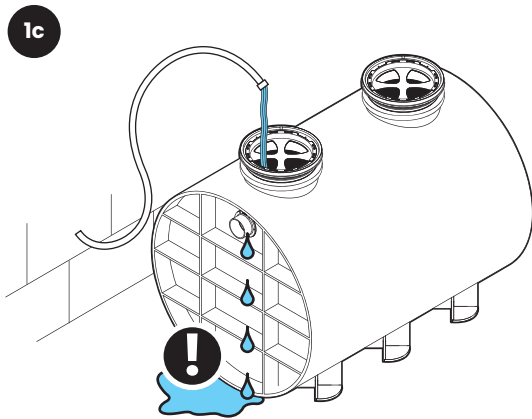


Cap both connection points with 6" flexible PVC caps.



Remove covers. For base unit testing fill with water to just above the highest connection.

Inspect unit, connections and gaskets for leaks. Check water level at specific time intervals per local code.

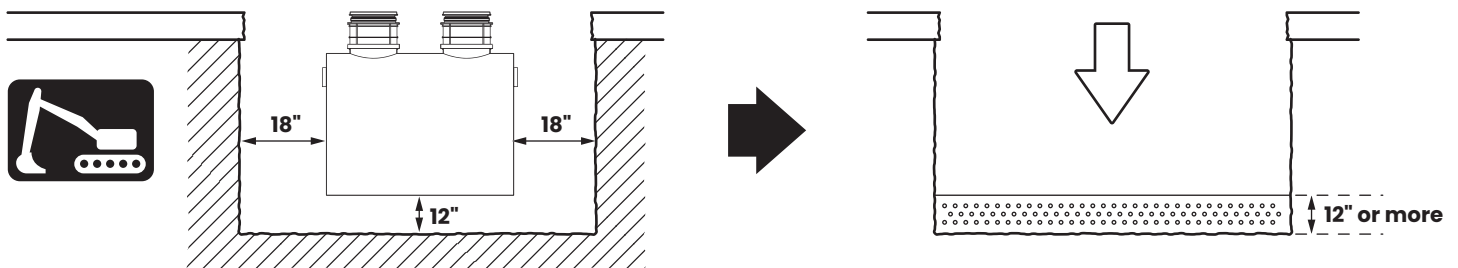


Have a Leak?

Call customer care at 913-951-3300

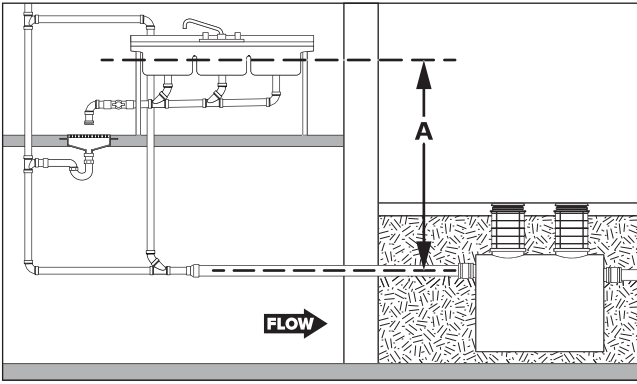
Hours 8am-5pm CST, M-F

2 Excavate Burial Pit



Excavate hole at least 18" larger than interceptor on all sides and 12" deeper than tank bottom. Lay a level bed of well-packed, crushed aggregate (approximately 3/4" size rock or sand, with no fines) in the base of hole.

3 Install Inlet Diffuser Components

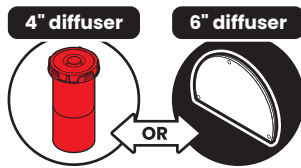


This unit is supplied with additional components for use in high flow/ increased head pressure conditions.

- If dimension "A" is 13 feet or less, no additional components are needed, **go to Step 4, Connect Piping**.
- If dimension "A" is more than 13 feet, or a high flow/increased head pressure condition exists, **follow Steps below.**

3a Choose appropriate inlet diffuser component based on diffuser size

Install flow control cartridge (red) or plate

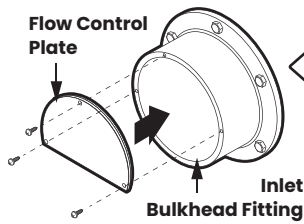


This unit is certified to ASME A112.14.3 (Type C) and CSA B481.1 and requires internal flow control. External flow control with vent not required.

3b Install chosen component

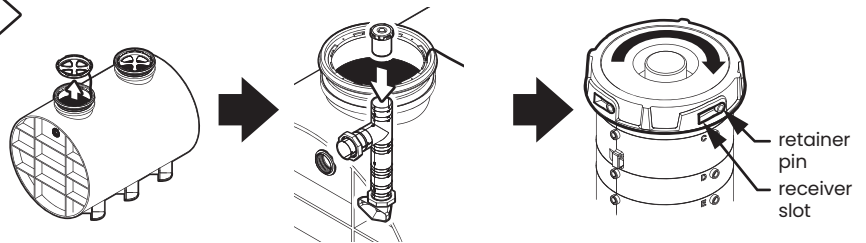
6" Diffusers

Before connecting piping and burial, fasten flow control plate to inlet bulkhead fitting using supplied screws. Holes in plate must line up with pre-drilled holes in bulkhead fitting and grooved side of plate must face the unit.



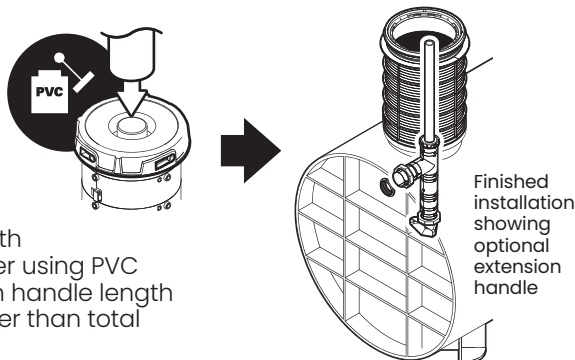
4" Diffusers

Remove Safety Star® insert and remove flow control cartridge from the parts bag. Slide component into top of inlet diffuser and rotate clockwise until cartridge drops onto the retainer pins. Continue rotating clockwise until pins are fully seated.



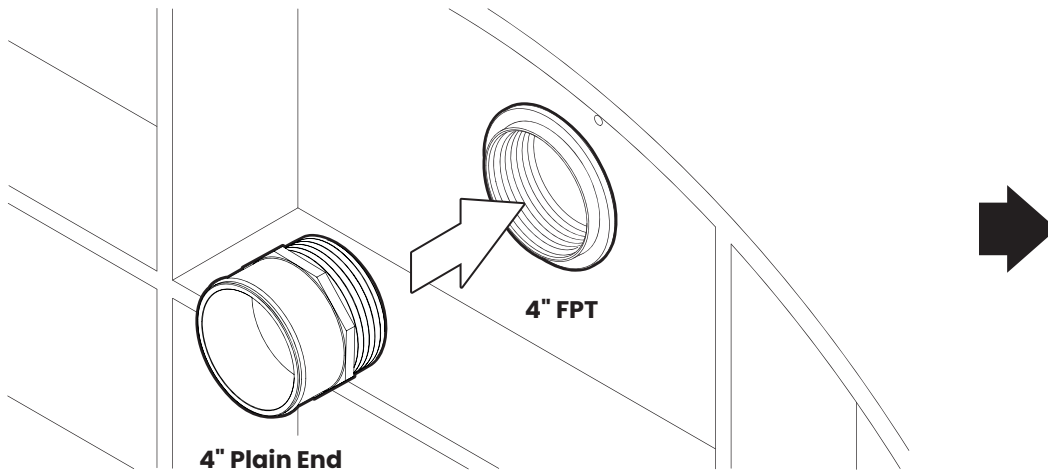
3c OPTIONAL for 4" Diffusers: install extension handle

For easy inlet diffuser cover or flow control cartridge removal in deep burial installations, 1-1/2" PVC SCH. 40 pipe may be used as an extension handle. Before risers have been installed, cut pipe to length and attach to top of cover using PVC primer/cement. Extension handle length should be about 12" shorter than total riser height.



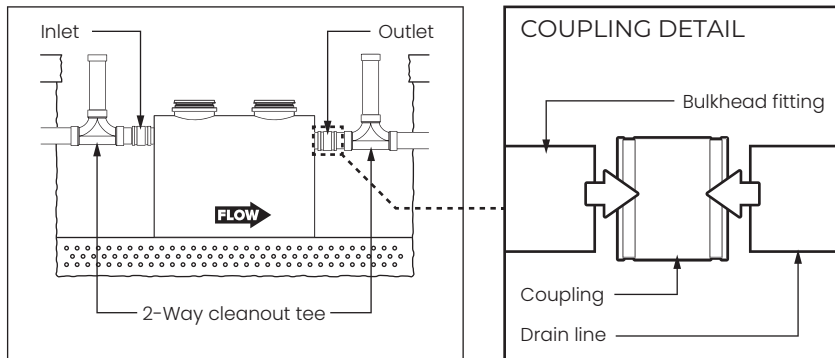
4 Connect Piping

4a Install plain end fittings (4" CONNECTIONS ONLY)



Screw plain end fittings (included) into bulkhead fittings using pipe thread sealant or tape approved for use with plastics. 6" connection types come pre-installed from the factory.

4b Connect interceptor to drain lines



Place unit into final position and set level. Mechanically couple inlet and outlet drainage lines to unit. **Do not solvent weld.** Ensure all upstream fixtures are trapped. Vent per local code. Installation of 2-way cleanout tees to grade (by others) is recommended for buried installations.

5 Wet or Air Test Piping Per Local Code

! WARNING! DO NOT AIR TEST UNIT OR RISER SYSTEM!
Doing so may result in property damage, personal injury or death.

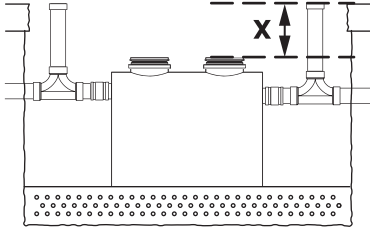


Have a Leak? Call customer care at 913-951-3300
Hours 8am-5pm CST, M-F

6 Bring Covers Flush-to-Grade

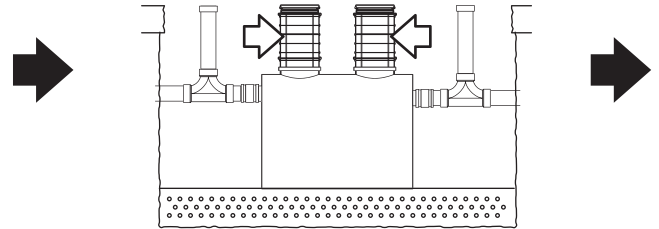
The GB-1000 is ready for burial depth of 77" from finished grade to bottom of tank (or 18" to centerline of inlet). Deeper burials will require extending the cover adapters and possibly adding risers.

6a Measure dimension X to determine riser height needed.



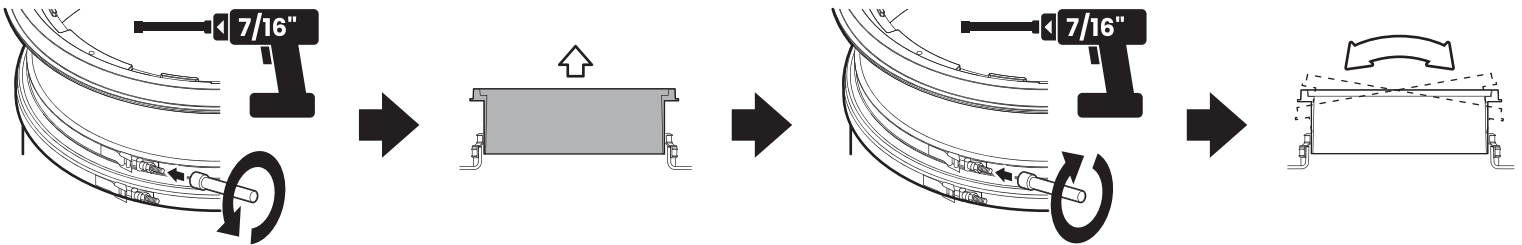
Riser Height Needed	Risers Required
0" - 4"	None (use adapter)
>4" - 34"	FCR2 (x2)
>34" - 64"	FCR2 (x4)
>64" - 94"	FCR2 (x6)

6b Install risers if required

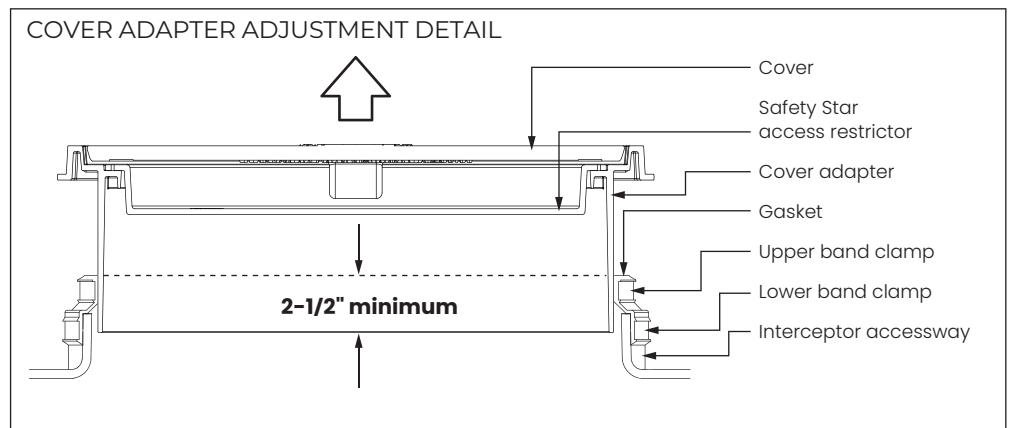


See instructions included with FCR2.

6c Make final cover adapter adjustments

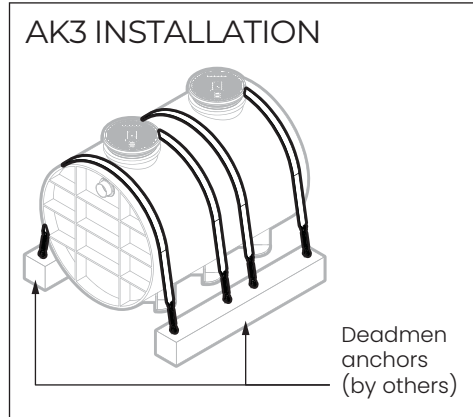


Loosen the cover adapter upper band clamp using 7/16" nut driver bit. Adjust cover adapter heights as needed. **Maintain a minimum 2-1/2" insertion depth.** Tighten upper band clamp to 5 -8 ft. lbs. of torque using 7/16" nut driver bit. If required, cover adapters may now be tilted up to 10° in any direction using gasket flexibility.



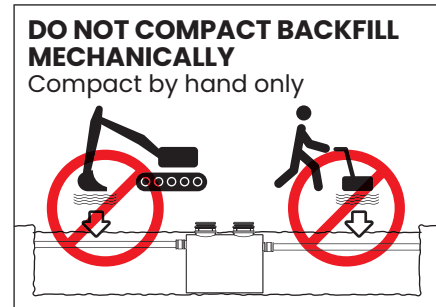
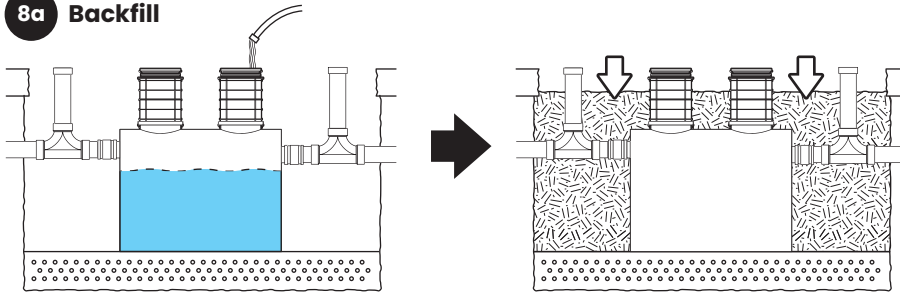
7 Install Anti-Flotation Anchor Kit

If the installation location is in a high water table or at risk area (including but not limited to tidal surge areas, floodplains and areas that receive storm water) the GB-1000 must be installed with Schier model AK3 anchor kit (with deadman anchors by others).



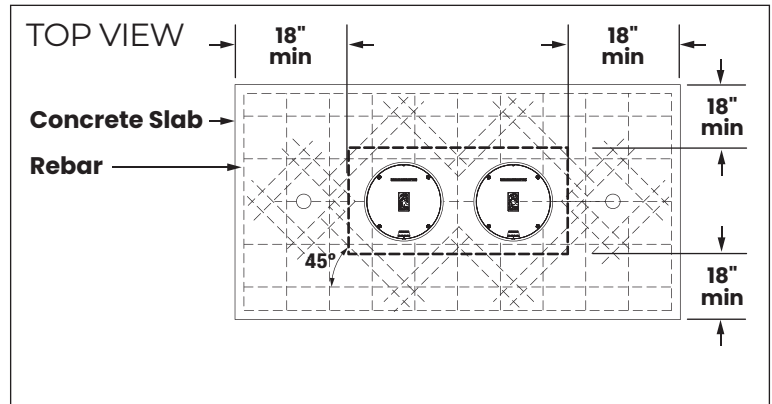
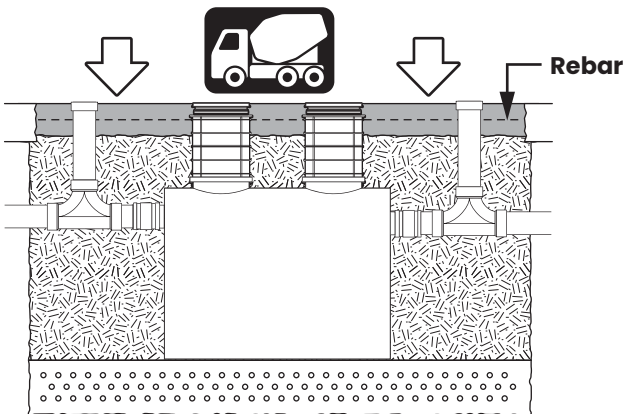
8 Backfill and Finished Grade

8a Backfill



Fill unit with water for stabilization and float-out prevention. Backfill evenly around tank using crushed aggregate (approximately 3/4" size rock or sand with no fines) or flowable fill. **Do not mechanically compact backfill around unit.**

8b Pour concrete slab to finished grade



Vehicular Traffic Areas:

Minimum 8" thick concrete slab with rebar required. Thickness of concrete around covers 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 (ø 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.

Pedestrian Traffic or Greenspace Areas:

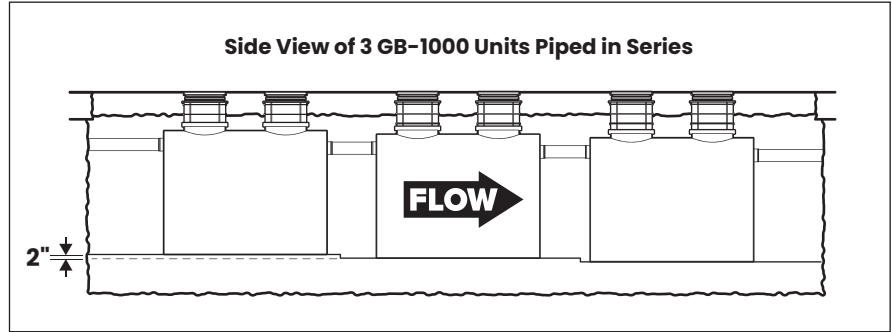
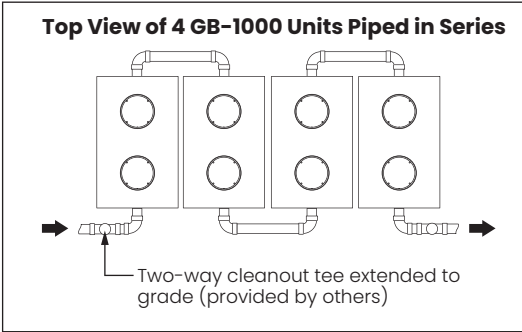
Minimum 4" thick concrete slab with rebar required.

SERIES INSTALLATIONS

For lower flow rates and higher grease storage requirements. Piping between units and two-way cleanout tees by others.

All units must be level in the excavation pit. Note that downstream units must be buried 2" deeper than the adjacent, upstream fixture. Two-way cleanout tees extended to finished grade should be installed before the first unit inlet, after the last unit outlet and in between units (if there is a long run of pipe between units) for line cleaning purposes.

NOTE: When the flow control is required, it should only be installed on the first unit in the series.



Rated Grease Capacities for Units Piped in Series

No. of Units In Series	Removal Efficiency	
	100 GPM - 98.8%	100 GPM - 99%*
2	13,094 lbs.	12,474 lbs.
3	19,641 lbs.	18,711 lbs.
4	26,188 lbs.	24,948 lbs.



Units piped in series are certified to ASME A112.14.3 (Type C) and CSA B481.1, and include an internal flow control. External flow control with vent not required.

* Satisfies Miami DERM 99% efficiency requirements