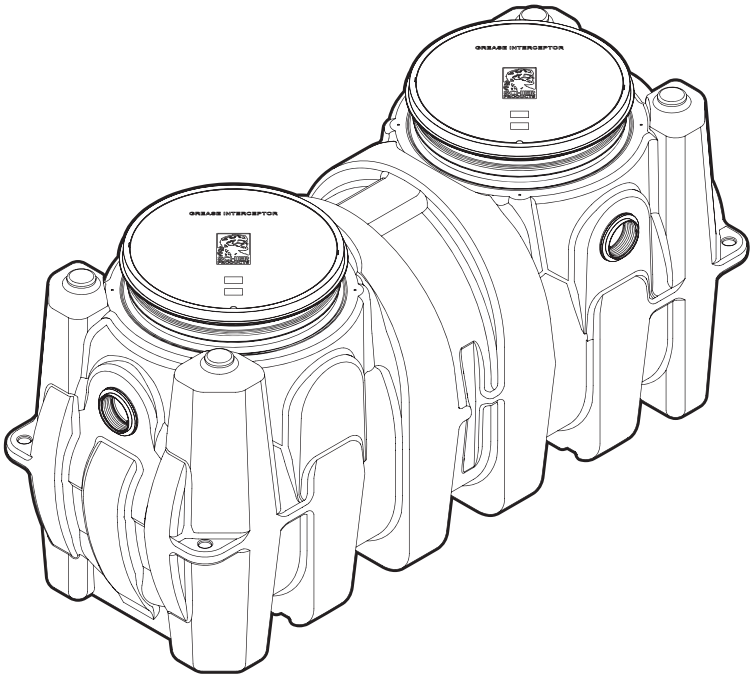
INSTALLATION GUIDE

SI-250

277 Gallon Solids Interceptor for Indoor / Outdoor Use



Contents

SCHIER

Part #: 5055-001-01
Find these instructions online at: schierproducts.com/si-250

SPECIAL PRECAUTIONS

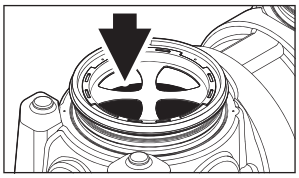
For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

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.

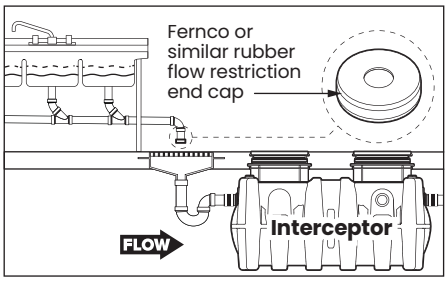
Installation Instructions

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.



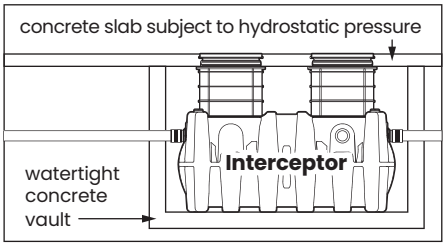
When Installing Interceptor Inside

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

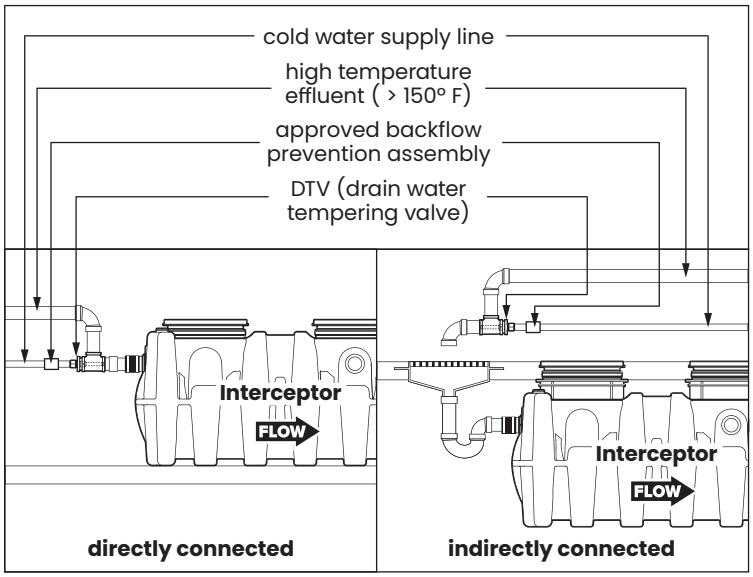


Hydrostatic/Pressure Slabs

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

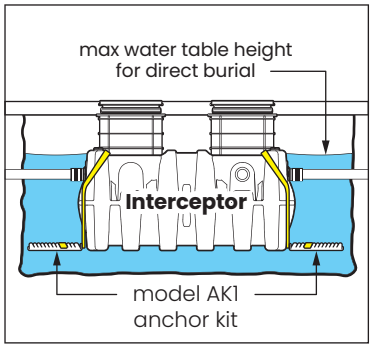


If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will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

SPECIAL PRECAUTIONS

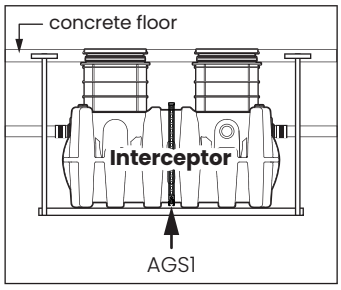
For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

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 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 SI-250 uses model AK1 anchor kit.

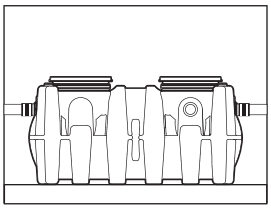
Suspended Installations



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. The wet weight of the interceptor combined with high temperature kitchen water creates the potential for tank deformation in suspended installations. In these situations Above Grade Support Kit model AGS1 is required to be installed to maintain SI-250 structural integrity.

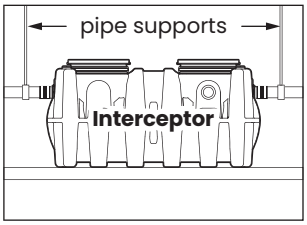
Fully Support Base of Unit

Install unit on solid, level surface in contact with the entire footprint of unit base

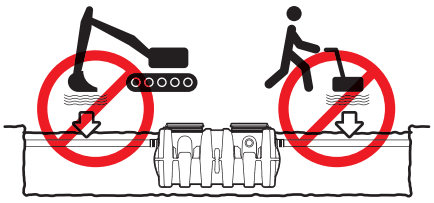


Support Inlet and Outlet Piping

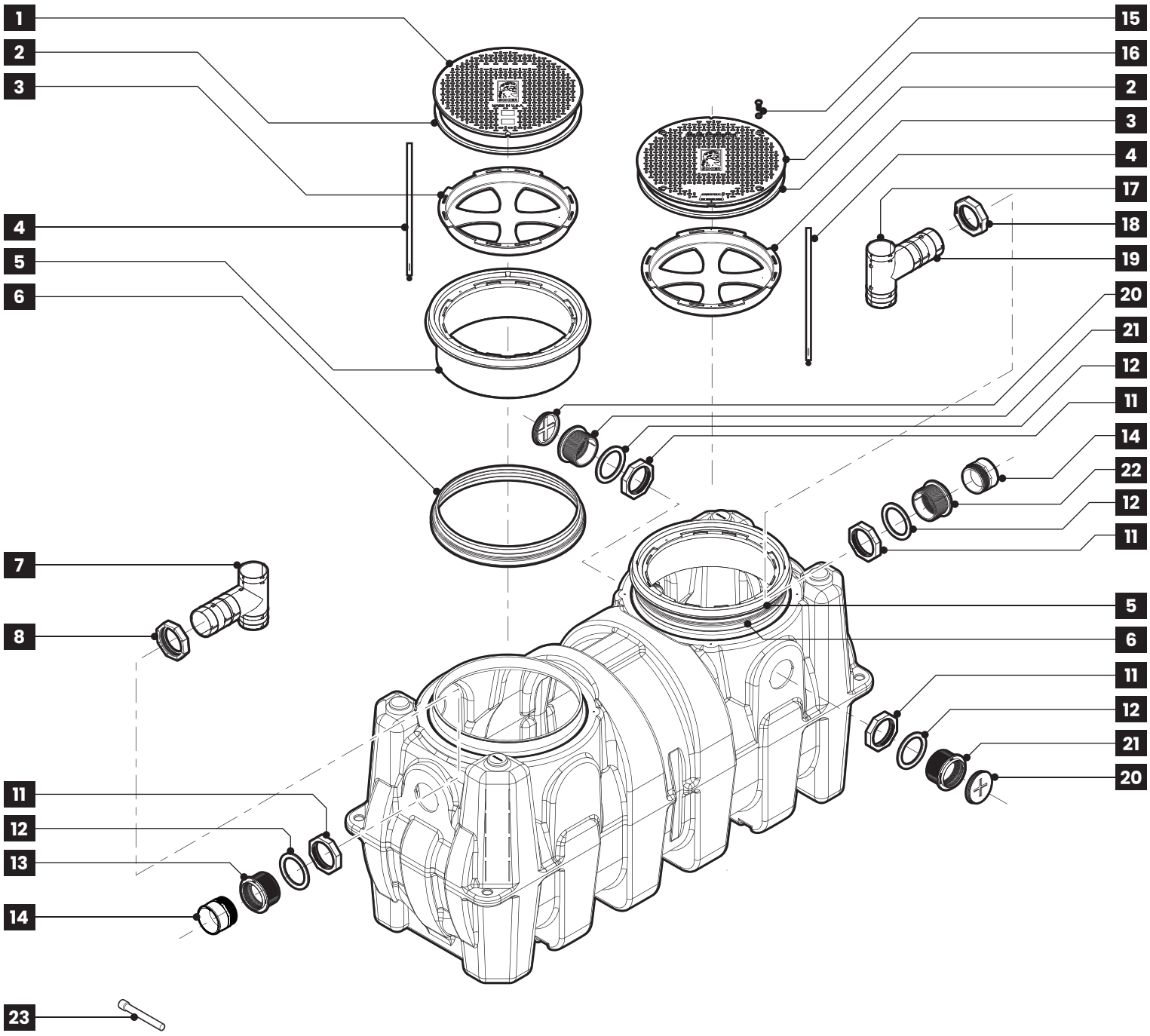
For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.



DO NOT COMPACT BACKFILL



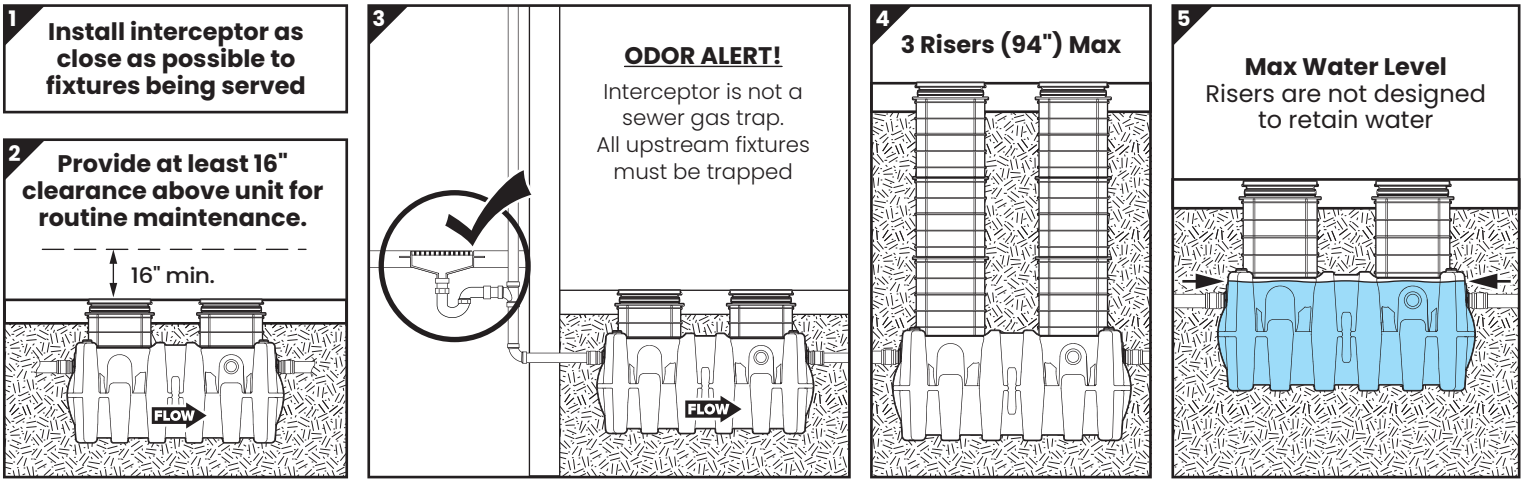
GETTING TO KNOW THE SI-250



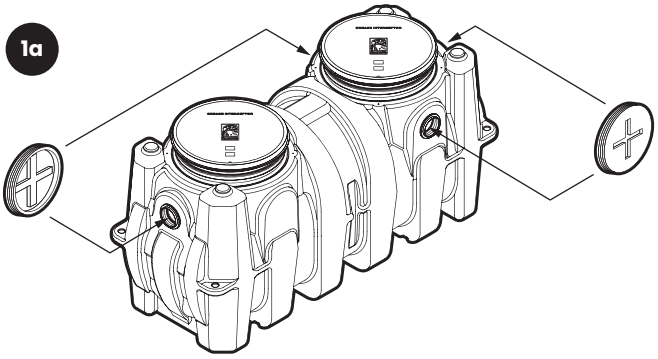
1. Pickable Cast Iron Cover (standard)
2. Cover Gasket
3. Safety Star (x2)
4. Safety Star Tether (x2)
5. Cover Adapter (x2)
6. Cover Adapter Gasket Assembly(x2) with Upper and Lower Stainless Steel Band Clamps
7. Inlet Diffuser
8. Inlet Diffuser Retaining Nut
11. Bulkhead Connection Retaining Nut
12. Bulkhead Connection Gasket
13. Inlet Bulkhead Connection 4" FPT
14. 4" Plain End Fitting (x2)
15. Composite Cover Bolts and Washers (x8)
16. Bolted Composite Cover (optional)
17. Air Relief/Visual Access
18. Outlet Diffuser Retaining Nut
19. Outlet Diffuser
20. 4" Cleanout Plug (x4)
21. Outlet Bulkhead Connection (optional) 4" FPT (x2)
22. Outlet Bulkhead Connection (standard) 4" FPT
23. 7/16" Nut Driver Bit

BURIED INSTALLATION

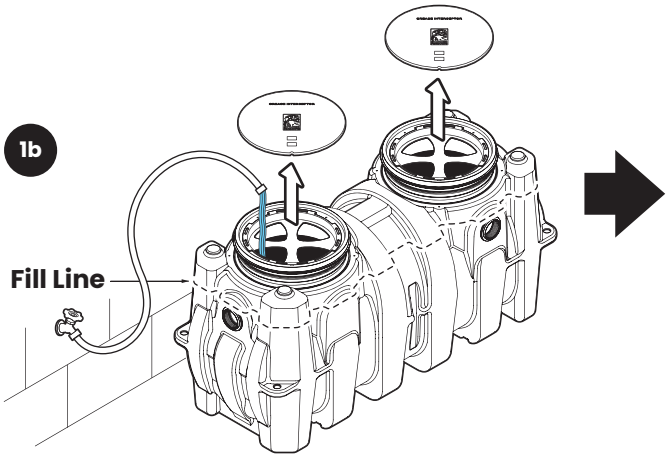
Special Precautions



1 Test tank for water tightness

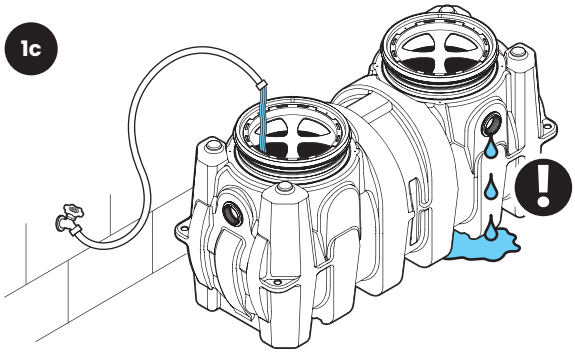


Cap all connection points with 4" cleanout plugs using pipe thread sealant or tape approved for use with plastics.



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.

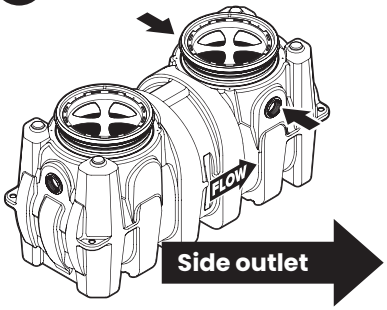


Have a Leak?

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

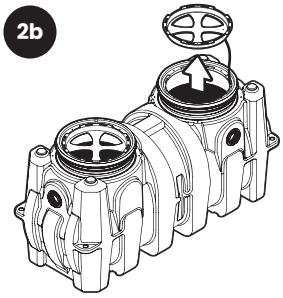
2 Set Up Outlet Diffuser and Install Cleanout Plugs

2a **Choose outlet location.**



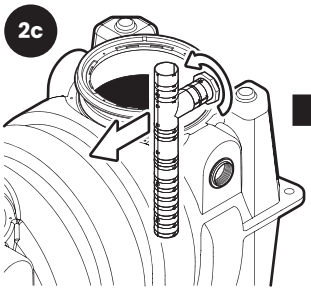
Side outlet

2b



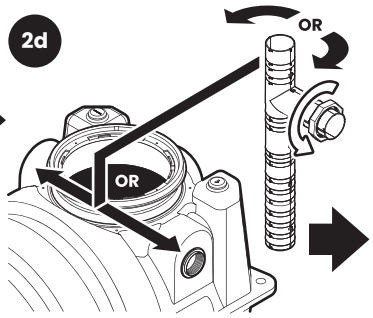
Remove safety star insert, leave tethered to unit.

2c



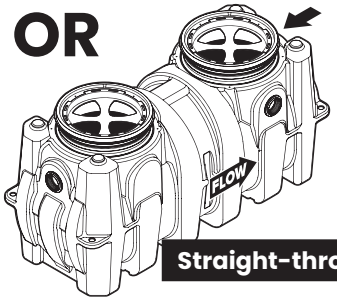
Unscrew diffuser retaining nut and remove outlet diffuser.

2d



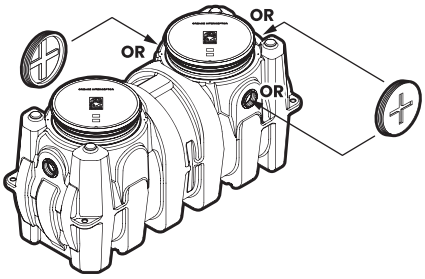
Rotate diffuser toward chosen outlet, insert and hand tighten retaining nut.

OR



Straight-through

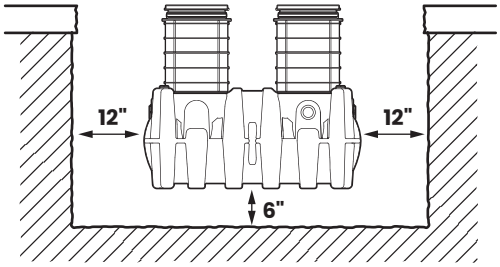
2e



Cap all unused connection points with 4" cleanout plugs using pipe thread sealant or tape approved for use with plastics.

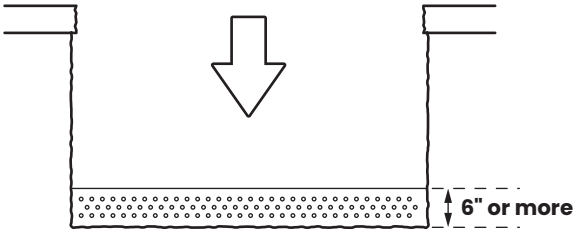
3 Excavate Burial Pit

3a



Excavate hole at least 12" larger than interceptor on all sides and 6" deeper than tank bottom.

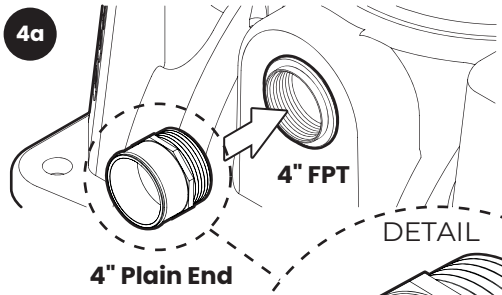
3b



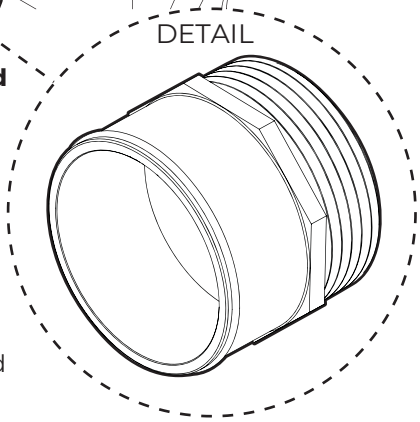
Lay a level bed of well-packed, crushed aggregate (approximately 3/4" size rock or sand, with no fines) in the base of hole.

4 Connect Piping

4a

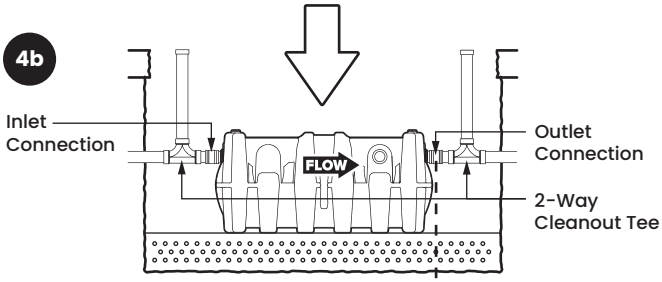


4" Plain End

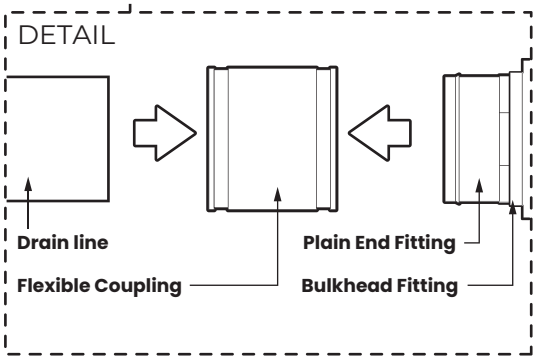


Screw plain end fittings (included) into bulkhead fittings using pipe thread sealant or tape approved for use with plastics. 6" connection types come pre-installed from the factory.

4b



Lower unit into pit 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.



5 Wet or Air Test Piping Per Local Code

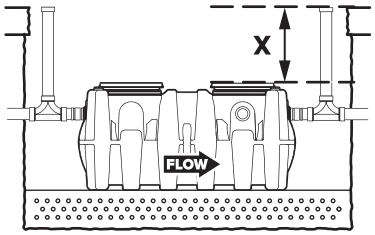
WARNING! DO NOT AIR TEST UNIT OR RISER SYSTEM!
Doing so may result in property damage, personal injury or death.

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

6 Bring Covers Flush-to-Grade

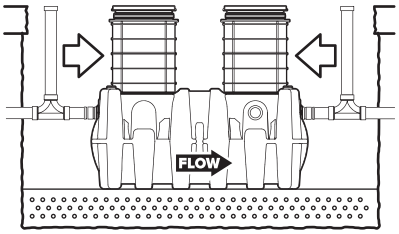
The GB-250 is ready for burial depth of 44" from finished grade to bottom of tank (or 13-1/2" to centerline of inlet). Deeper burials will require extending the Cover Adapters and possibly adding risers.

6a Measure dimension X to determine riser height needed.



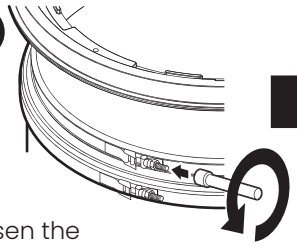
Riser Height Needed	Risers Required
0" - 4"	None (use adapter)
>4" - 34"	FCR2 (x2)
>34" - 64"	FCR2 (x4)
>64" - 94"	FCR2 (x6)

6b



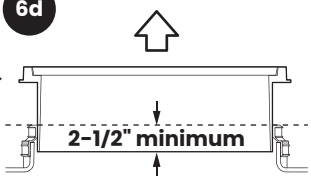
Install risers if required (see instructions included with FCR2).

6c



Loosen the Cover Adapter Upper Band Clamp using 7/16" Nut Driver Bit.

6d

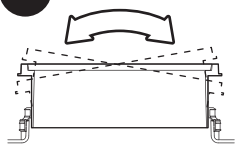


Adjust Cover Adapter heights as needed. **Maintain a minimum 2-1/2" insertion depth.**

6e

Tighten Upper Band Clamp to 5 -8 ft. lbs. of torque using 7/16" Nut Driver Bit.

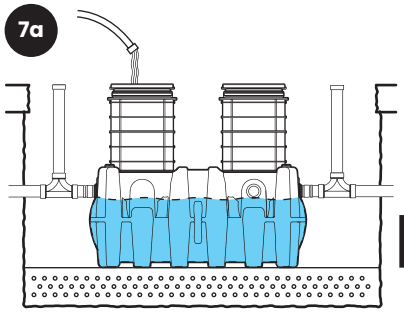
6f



If required, Cover Adapters may now be tilted up to 10° in any direction using gasket flexibility.

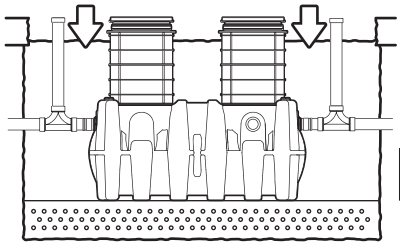
7 Backfill and Finished Grade

7a



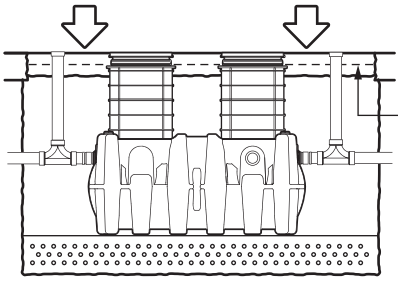
Fill unit with water for stabilization and float-out prevention.

7b



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.**

7c

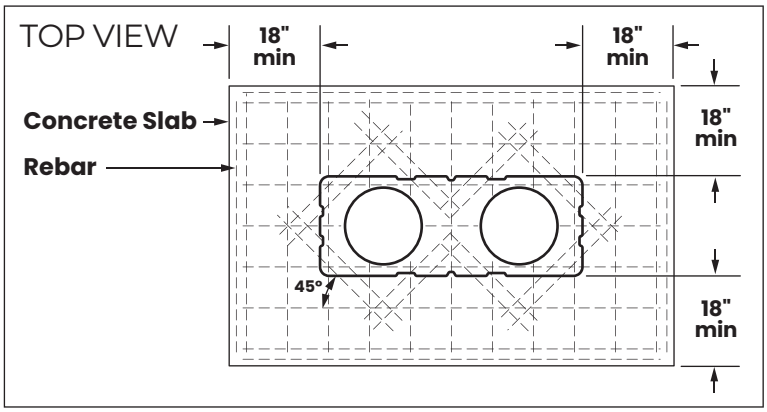


Pour concrete slab to finished grade.

7c1

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.

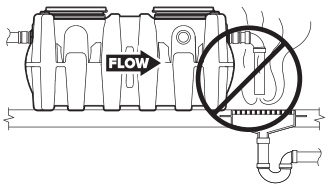


ON THE FLOOR INSTALLATION

Special Precautions

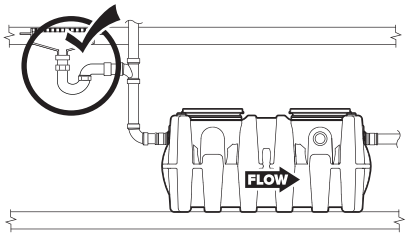
1 **ODOR ALERT!**

Do not install air gap on outlet side of interceptor.



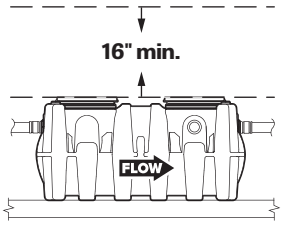
2 **ODOR ALERT!**

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



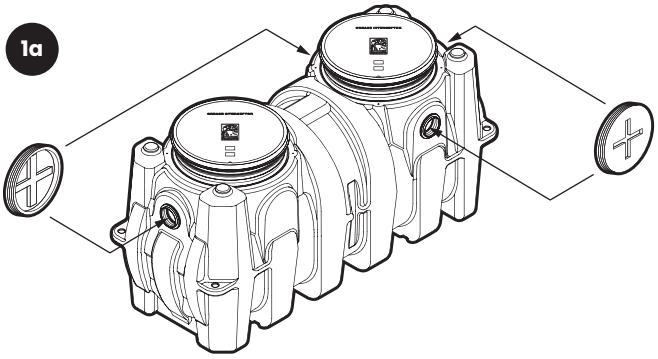
3 **Install interceptor as close as possible to fixtures being served**

4 **Provide at least 16" clearance above unit for routine maintenance.**



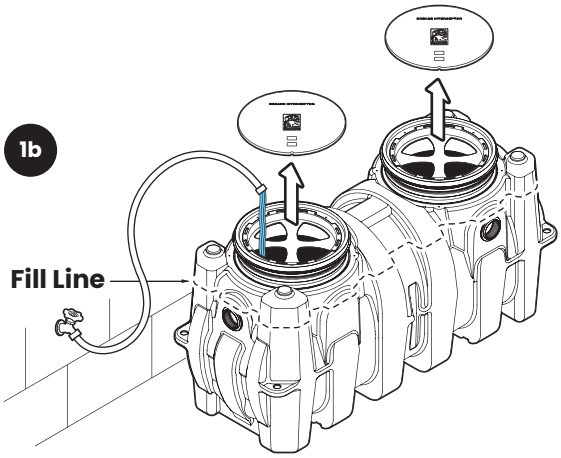
1 Test tank for water tightness

1a



Cap all connection points with 4" cleanout plugs using pipe thread sealant or tape approved for use with plastics.

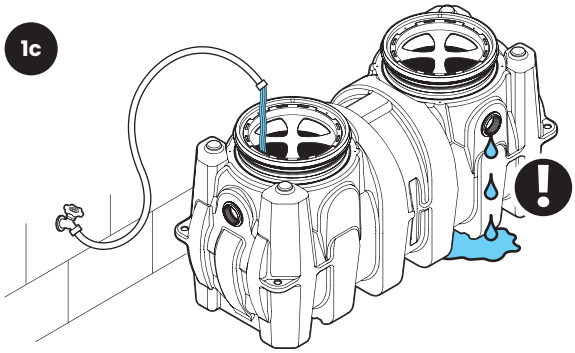
1b



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.

1c

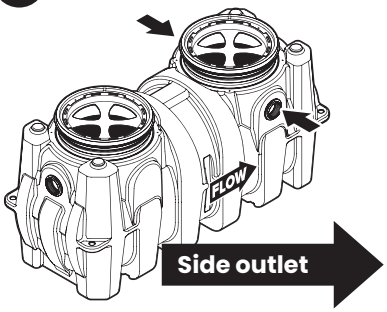


Have a Leak?

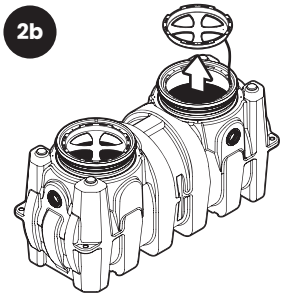
Call customer care at 913-951-3300
Hours 8am-5pm CST, M-F

2 Set Up Outlet Diffuser and Install Cleanout Plugs

2a **Choose outlet location.**

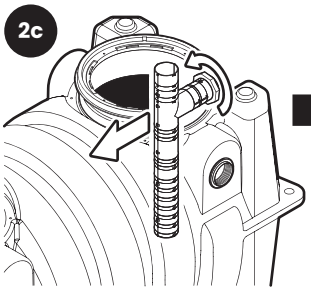


2b



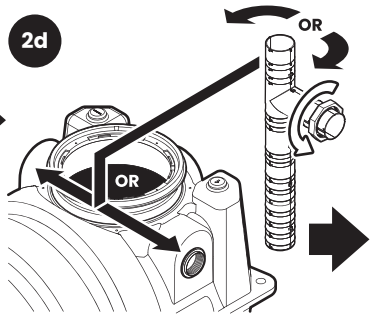
Remove safety star insert, leave tethered to unit.

2c



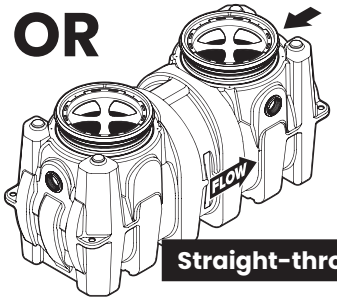
Unscrew diffuser retaining nut and remove outlet diffuser.

2d

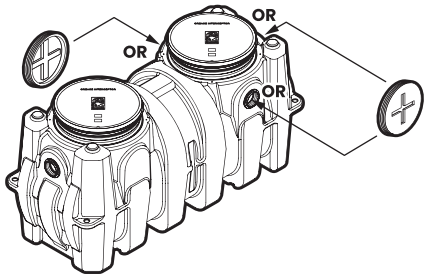


Rotate diffuser toward chosen outlet, insert and hand tighten retaining nut.

OR



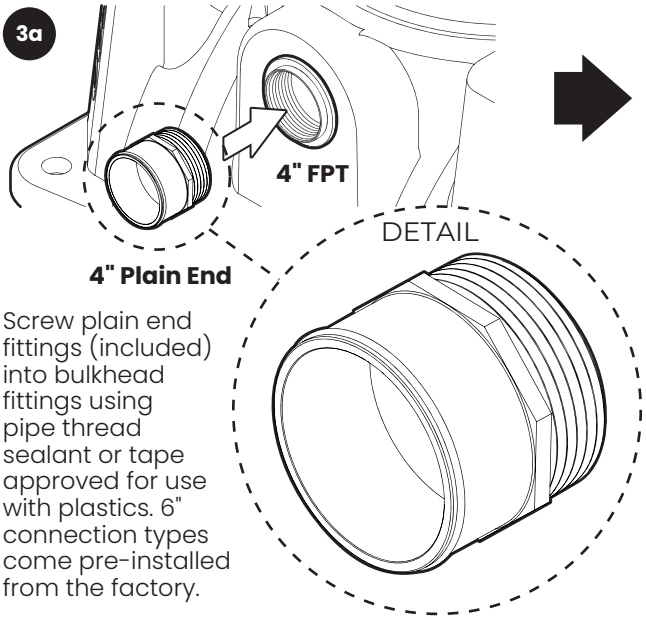
2e



Cap all unused connection points with 4" cleanout plugs using pipe thread sealant or tape approved for use with plastics.

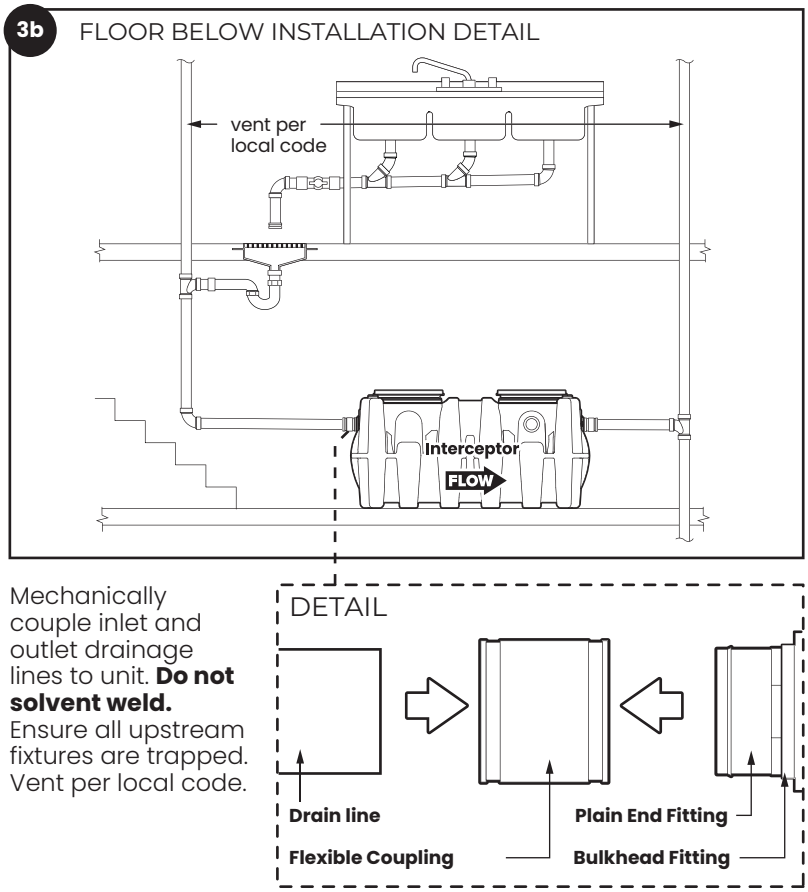
3 Connect Piping

3a



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.

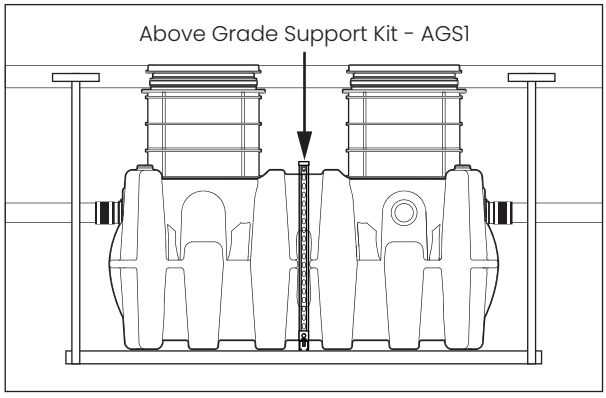
3b



Mechanically couple inlet and outlet drainage lines to unit. **Do not solvent weld.** Ensure all upstream fixtures are trapped. Vent per local code.

4 Install AGS1 Above Grade Kit (sold separately)

The wet weight of the interceptor combined with high temperature kitchen water creates the potential for tank deformation in suspended installations. In these situations Above Grade Support Kit model AGS1 is required to be installed to maintain SI-250 structural integrity.



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

1 High Water Table Installations, See Anchor Kit Model AK1

If the installation location is in a high water table area or at risk are (including but not limited to tidal surge areas, floodplains and areas that receive storm water) the SI-250 must be installed with Schier model AK1 anchor kit.