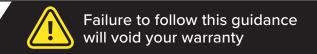
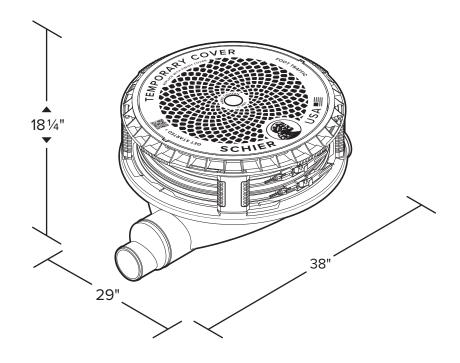
INSTALLATION GUIDE



SV24 Sewer Viewer* inspection port



Cover adapter may be raised or lowered 21/2".

Examine product for damage and read all instructions prior to installation.

Please report significant damage to customer service at (913)-951-3300. Warranty is void if a damaged product is installed, or if the product is not installed in conformance with all local codes. Schier recommends installation only by a licensed plumber.

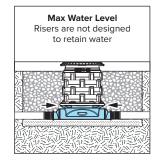


SPECIAL PRECAUTIONS

PRESSURE TESTING

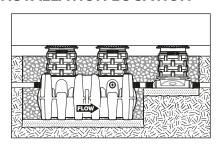
Do not pressure test the inspection port or riser system. Doing so may result in property damage, personal injury or death. The inspection port is intended for open system (vented) gravity drainage use only and should not be used in closed system pressure applications.

Before installation, the inspection port should be tested up to top of tank for water tightness. See page 5 for details. The risers are not designed to retain water and should not be water tested.



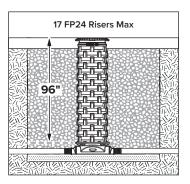
INSPECTION PORT INSTALLATION LOCATION

Install inspection port as close as possible to and downstream from interceptor being served

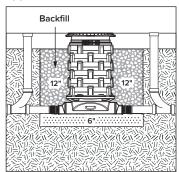


EXCAVATION, BACKFILL AND PAD

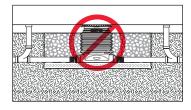
Maximum burial depth: The inspection port should not be buried deeper than 96" from the shoulder of the unit to grade. For deeper burials contact customer support.



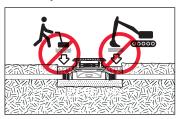
Approved backfill: Backfill must be clean, crushed stone approximately 1" in size (AASHTO M43 Size #57 or similar) free of debris and fines. Native soil and sand are not approved backfill materials.



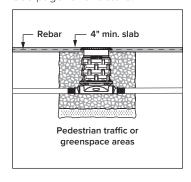
Corrugated pipe is not allowed for riser use.



Do not compact backfill mechanically: Compact by hand only



Concrete pad required at grade: For all buried applications. See page 10 for details.



Rebar 8" min. slab Vehicular Traffic Areas

NOTE: An alternate 6" pad may be allowed if the site/civil engineer has provided written calculations and stamped approval that has been submitted and approved by Schier Products.

Do not install using native soil at grade.



Do not install using asphalt pad.



SPECIAL PRECAUTIONS



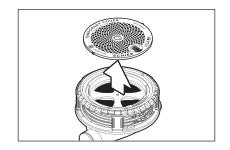
COVER SELECTION

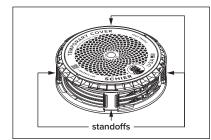
Discard temporary cover:

Temporary cover shipped with this unit is not intended for post construction use and must be replaced with a permanent pedestrian or traffic cover by Schier before the inspection port is put into service.

Secure cover adapters:

Cover adapters must be secured to base units in all above grade installations (ex: in a basement). Use the (4) standoffs included with the manway secured into the locked position.





Pedestrian cover - polypropylene:

P24-GI bolted injection molded cover should be used for above grade and pedestrian rated applications. Not recommended for outdoor use unless in a non-traffic area.

Plastic, bolted 24", rated to 2,000 lbs., generally for indoor or above grade use.

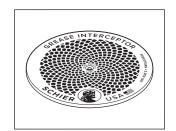
Traffic cover - cast iron:

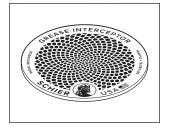
T24-GI pickable cast iron covers should be used for outdoor buried and vehicle rated applications. Not recommended for above grade or most indoor use.

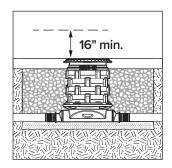
Cast iron, 24", H-20 rated to 16,000 lbs., generally for outdoor use.

Required clearance above covers:

Allow at least 16" of clearance above the inspection port for routine maintenance.







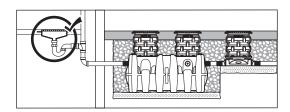
INDOOR INSTALLATION TIPS

Dishwasher discharge: If your dishwashing sink(s) discharges into a floor drain/sink (drain), you may 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.

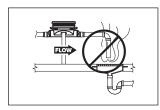
High temperature kitchen water: Wastewater entering the units should not exceed 150° F. If wastewater temperatures will exceed 150° F, a drain water tempering valve (DTV) should be installed to cool the water.

Odor alert!

The units are not sewer gas traps. All upstream fixtures must be trapped.



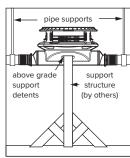
Do not install an air gap on the outlet side of the inspection port.



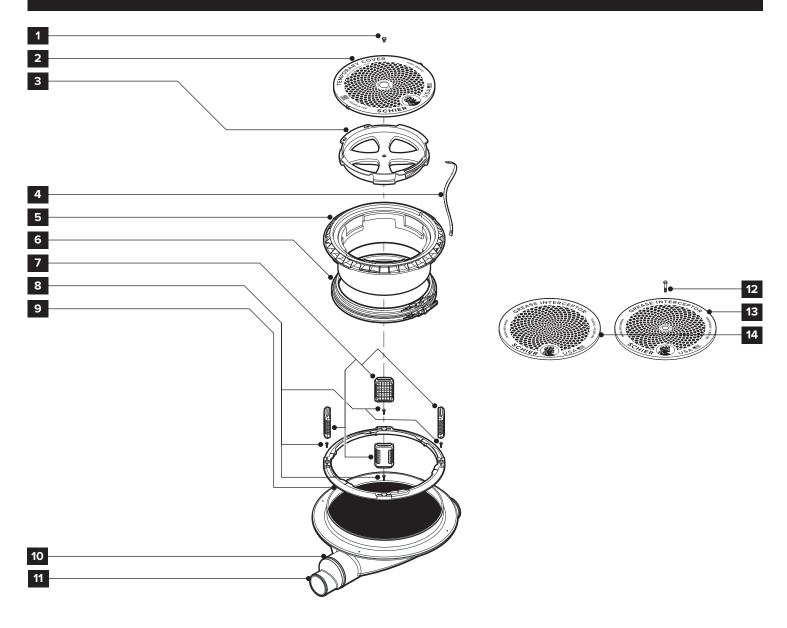
Above grade installation support:

To prevent tipping and damage to drain line connections, SV24 above grade installations must be supported by a structure (not included) built on-site. The support structure may be a platform or trapeze that contacts the inspection port at the built-in above grade support detents and is able to hold the weight of the unit.

Inlet and outlet piping must be properly supported.



GETTING TO KNOW THE SV24



- 1. Temporary cover bolt
- 2. Temporary cover
- 3. Safety Star® access restrictor
- 4. Safety Star® tether
- 5. Cover adapter
- **6.** Neck gasket assembly with upper and lower stainless steel band clamps
- 7. Standoffs (x4)
- 8. Tank ring mounting bolts (x4)
- 9. Tank ring
- **10.** 6" Plain End Connection (achieved by cutting off the 4" connection at the trim line) (x2)
- **11.** 4" Plain End Connection (standard) (x2)
- 12. Pedestrian cover bolt (not included)
- 13. Pedestrian cover (not included)
- 14. Traffic cover (not included)

1 Remove installation guide



Rotate Safety Star® counterclockwise to unlock and remove, leaving tethered to unit.



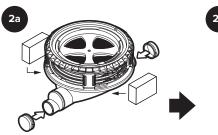
Remove installation guide from interior of unit.



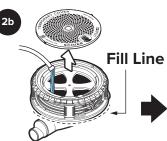
Installation Guide

Missing guide? Call customer support at 913-951-3300

2 Test tank for water tightness



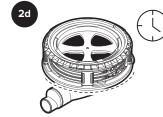
Plug inspection port connections with 4" caps (provided by others). Use pipe thread sealant or tape approved for use with plastic. Support unit with blocks (provided by others) to keep level.



Remove temporary cover and fill the inspection port with water until all connections are submerged.



Inspect the inspection port body, connections and gaskets for leaks.



Check the water level inside the inspection port at specific time intervals per code.

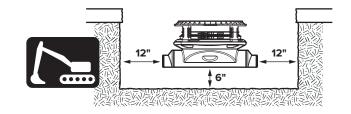
Have a Leak? Call customer support at 913-951-3300

3 Excavate burial pit



ONLY

Excavate the inspection port burial pit to at least 12" larger than the inspection port on all sides and 6" deeper than the inspection port bottom.

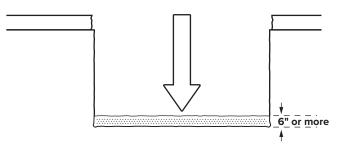


4 Fill base layer



Lay a level layer of well-packed, crushed aggregate at the base of the pit. Base layer material must be clean, crushed stone approximately 1" in size (AASHTO M43 Size #57 or similar) free of debris and fines.

Native soil and sand are not approved backfill materials.



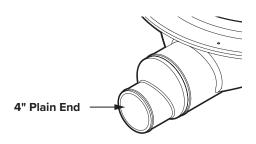
5 Connect piping to interceptor

5a

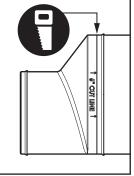
Install plain end fittings (4" connections only)

The SV24 inspection port comes from the factory ready to connect to 4" drain lines.

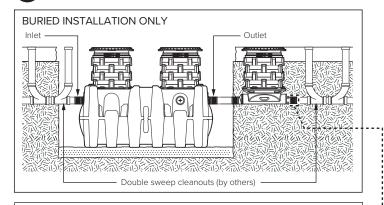


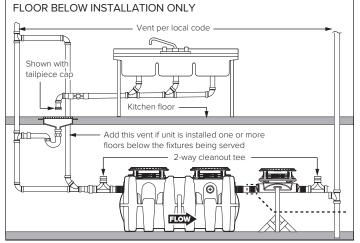


6" connections onlyCut off the 4" inlet and outlet connections at the premarked cut lines. Remove any burrs from the cut.



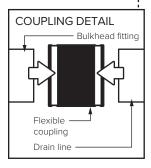
5b Connect inspection port to drain lines





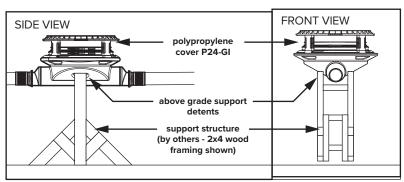
Place the interceptor into its final position and set level. Mechanically couple the inlet and outlet fittings to the drainline using a flexible coupling. **Do not glue or solvent weld.**

Notes: Ensure all upstream fixtures are trapped. Vent the drainline per local code. The installation of 2-way cleanout tees is recommended for above grade installations. The installation of double sweep cleanouts or combination wyes is recommended for buried installations, check local code requirements to confirm acceptability.



6 Install above grade support (by others)

To prevent tipping and damage to drain line connections, SV24 above grade installations must be supported by a structure (not included) built on-site. The support structure may be a platform or trapeze that contacts the inspection port at the built-in above grade support detents and is able to hold the weight of the unit.



7 Bring covers flush-to-grade



For buried installations, the cover adapter can be raised or lowered up to 2½" from the factory set position. Deeper burials require Fast Pitch® FP24 risers to





Determine number of risers required

extend cover adapter to grade.

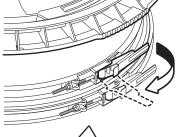
Measure the distance X from either the centerline of inlet, or the top of the temporary covers (from factory set position with standoffs in place) to finshed grade. Consult the chart below to determine the number of risers required.

RISER HEIGHT NEEDED MEASURED FROM		
Centerline of inlet	Top of temporary covers	FD0.4
X	X	FP24 risers required per manway
16 - 18½"	0 - 2½"	0
18½ - 23½"	2½ - 7½"	1
23½ - 28½"	7 ½ - 12 ½"	2
28½ - 33½"	12½ - 17½"	3
33½ - 38½"	17½ - 22½"	4
38½ - 43½"	22½ - 27½"	5
43½ - 48½"	27½ - 32½"	6
48½ - 53½"	32½ - 37½"	7
53½ - 58½"	37½ - 42½"	8
58½ - 63½"	42½ - 47½"	9
63½ - 68½"	47½ - 52½"	10
68½ - 73½"	52½ - 57½"	11
73½ - 78½"	57½ - 62½"	12
78½ - 83½"	62½ - 67½"	13
83½ - 88½"	67½ - 72½"	14
88½ - 93½"	72½ - 77½"	15
93½ - 98½"	77½ - 82½"	16
98½ - 103½"	82½ - 87½"	17

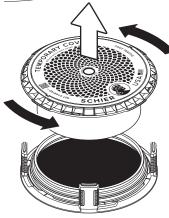
Reducing interceptor height for shallow burials

The cover adapter may be lowered up to 2½" from the factory set position. Loosen the neck gasket upper band clamp, remove the standoffs and go to Step 8d.

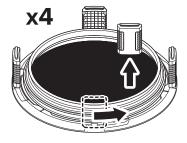




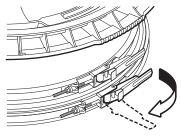
Loosen the upper band clamp by pulling open the quick release locking lever



Grab the cover adapter handles and turn it counterclockwise to unlock it from the tank. Remove cover adapter



Remove the four standoffs from the tank ring (slide out of slots)



Loosen the lower band clamp by pulling open the quick release locking lever



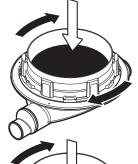
Remove the neck gasket from the inspection port.



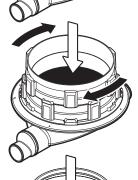
7 Bring covers flush-to-grade (continued)



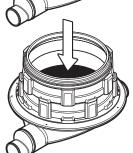
7c Install risers and replace neck gasket



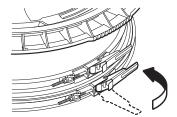
Place the Fast Pitch® riser onto the tank ring and align tabs on riser into the slots on tank ring. Turn clockwise until the riser fits firmly into place.



Place additional risers making sure each riser locks firmly into place until proper height is achieved.



Attach the neck gasket on top of the last riser. Ensure that the gasket fully surrounds the top of the riser.



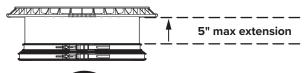
Tighten the lower band clamp by pushing the quick release locking lever closed.

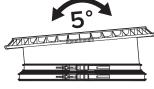
7d Make final cover adapter adjustments



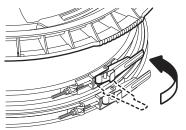
Insert cover adapter into riser assembly.

Adjust cover adapter heights as needed.





Cover adapters may be tilted up to 5° in any direction.



Tighten the upper band clamp by pushing the quick release locking lever closed.

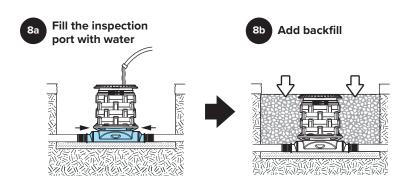
Adjusting neck gasket band clamp tension

Factory set clamp tension should not need to be modifed. If necessary, adjust by first pulling open the quick release locking lever. Then slightly hand tighten (clockwise) or loosen (counter-clockwise) hex nut at end of threaded rod.

8 Backfill around inspection port







Backfill evenly around the inspection port and risers with clean, crushed stone approximately 1" in size (AASHTO M43 Size #57 or similar) free of debris and fines.

Native soil and sand are not approved backfill materials.

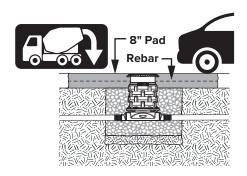


Note: Do not mechanically compact the backfill over top and around the interceptor.

9 Concrete pad at grade required







9a Vehicular traffic areas

- Concrete pad at grade must have a minimum thickness of 8" and be reinforced with rebar. An alternate 6" pad may be allowed if the site/civil engineer has provided written calculations and stamped approval that has been submitted and approved by Schier Products.
- Pad dimensions must extend 18" beyond the silhouette of the insection port;
 74" X 65" for the SV24.
- Concrete should have 28 day compressive strength of 4,000 PSI.
- Use No. 4 rebar (Ø ½") grade 60 steel per ASTM A615: connected with tie wire.
- Rebar to be $2\frac{1}{2}$ " from the edge of the concrete and spaced in a 12" grid with 4" spacing around access openings.

Rebar —

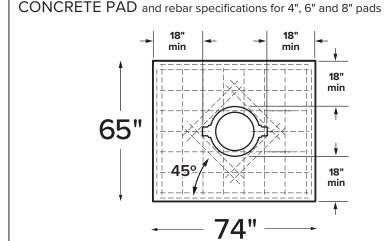
4" Pad

Pedestrian traffic or greenspace areas

- Concrete slab at grade must have a minimum thickness of 4" and be reinforced with rebar.
- Follow all other guidelines for vehicular traffic areas







NOTE: Use rebar support chairs to vertically position rebar in the middle of the pad and prevent rebar movement during concrete pour.