# **OIL SEPARATORS - LARGE EXTERIOR UNITS**

(Models OS-750, OS-1000 and OS-1500)

#### \*\*For buried applications only

#### **Sheet Descriptions**

Sheet #1 - Series overview, Warranty information, Operations & Maintenance

Sheet #2 - Installation guidelines

Sheet #3 - TeleGlide Riser installation guidelines



# **Leak/Seal Testing**

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

<u>Base Unit:</u> To perform a leak/seal test on the base unit, cap/plug all plumbing connections, remove the cover, and fill the unit with water just above the highest connection. Inspect unit and connections for leaks. Check water level at specific time intervals per local code. Note: All Large series tanks have been through a 24 hour water test prior to shipment from the factory.

<u>TeleGlide Riser System:</u> If required by local code, the riser system may be leak/seal tested similar to the base unit. <u>CAUTION:</u> the riser(s) must be supported before filling with water to keep from tipping over. Once riser system is in place and properly supported, cap/plug all plumbing connections on the main unit, remove the cover from the top of the riser assembly and fill the unit and riser system with water to finished grade level. Carefully, as the riser(s) will be very heavy from the weight of the water, inspect all gasket(s) and clamps (if applicable) for any leaks. Check water level at specific time intervals per local code.

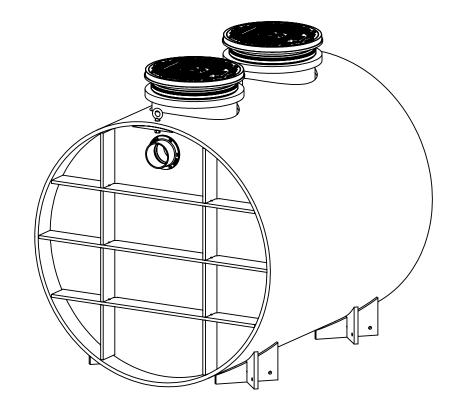
## **Lifetime Warranty**

Effective March 2nd of 2015 Striem represents and warrants that HDPE products will be free from any and all defects in material and workmanship, including corrosion, during the lifetime of the plumbing system in which the Products were originally installed and will, at its option, agree to repair, replace, or supply credit to the original purchaser.

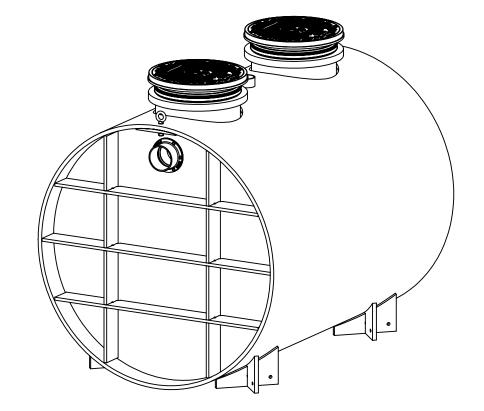
This warranty does not cover damage caused by the Products' normal usage, or wear and tear, nor does it cover damage from naturally occurring phenomenon, including, but not limited to UV, freeze-related damage, or natural disasters. This warranty does not cover the purchaser's cost of routine maintenance including replacement of parts required in routine maintenance. This warranty does not cover fabricated steel products, or any monitoring equipment. This warranty shall be effective if, and only if, the Products were:

- installed in accordance with Striem's notes, specifications and instructions, for installation, operation, and maintenance;
- installed in conformance with all applicable building and plumbing codes, and passed all applicable testing methods immediately following installation;
- not subjected to misuse or abuse, whether negligent or intentional;
- never modified, repaired, or altered by any individual(s) not authorized by Striem;
- sold through a Striem qualified wholesale distributor.

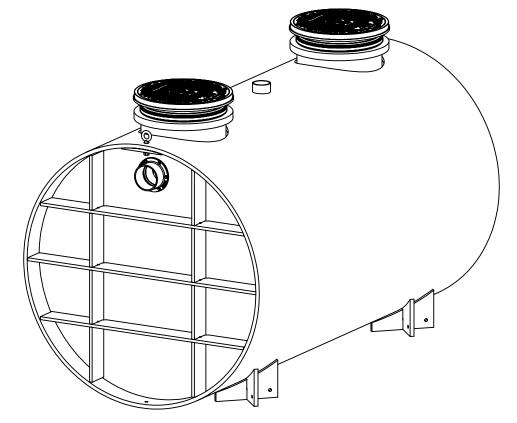
This warranty is the purchaser's sole and exclusive remedy, and acceptance of this exclusive remedy is a condition of the contract for the purchase of these Products. In no event shall Striem be liable for any incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, losses or delays claimed to be as a consequence of any damage to, failure of, or defect in any products including, but not limited to, any claims for loss of profits, transportation, removal and installation charges. This warranty is exclusive and in lieu of all other warranties or conditions, written or oral, expressed or implied.



OS-750
314 gpm, 750 gallons
401 gallon oil capacity
307 gallon sand capacity



OS-1000 314 gpm, 1,000 gallons 451 gallon oil capacity 347 gallon sand capacity



OS-1500
314 gpm, 1,500 gallons
610 gallon oil capacity
486 gallon sand capacity

Call Striem with questions or suggestions @ 1-913-222-1500 Customer Service Hours: 8 AM-5 PM CST

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### **OPERATION**

Striem Oil Separators are engineered to separate oil and other lighter-than-water contaminants from wastewater to keep them from entering the sewage system. This is accomplished using Striem's patented Diffusion Flow design. The inlet diffusor distributes the wastewater through the separator in a smooth, even flow pattern which eliminates dead spots. This diffused flow assures that the oil and sediment layers are undisturbed and increases the efficiency of the separator.

#### **MAINTENANCE**

- 1. Remove covers.
- 2. Remove all contents of the oil separator including oil, sediment and wastewater. For most thorough cleaning contact a professional pumper contractor.
- 3. Clean the drain lines, diffusers and air relief thoroughly of all debris.
- 4. Run sinks to fill unit with water.
- 5. Inspect gasket for wear and tear, replace covers.
- 6. Dispose of oily contents per local code.

### **PUMPING FREQUENCY:**

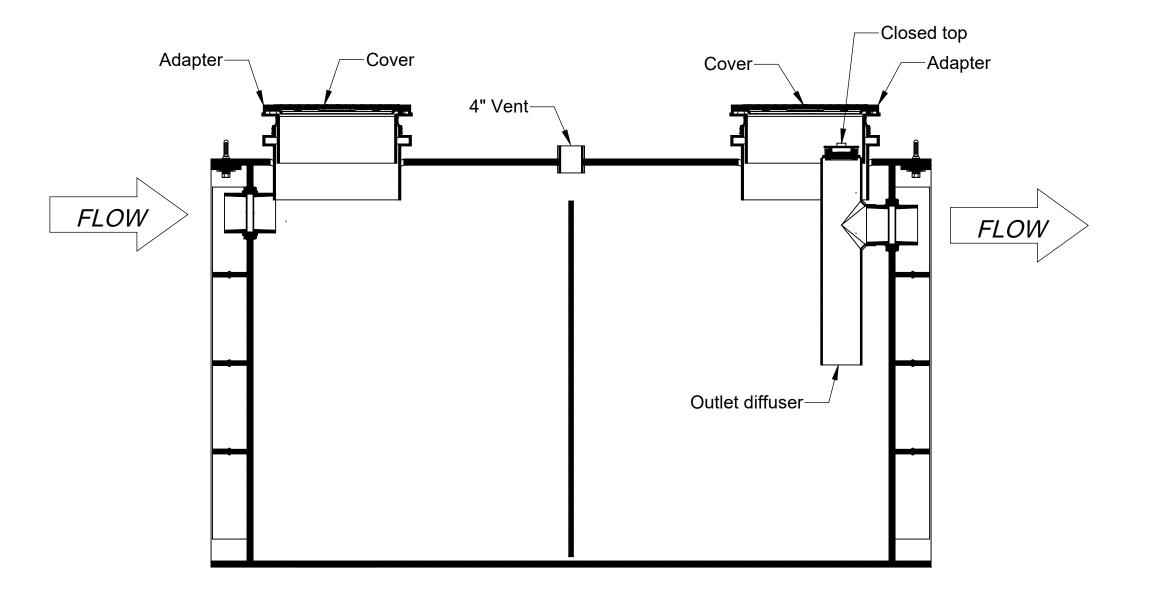
Frequency depends on the capacity of the interceptor and the amount of oil and sediment in the wastewater.

Monitor each pumping to establish an adequate maintenance schedule based off actual site variances. Levels can be tested with core sampler. Striem recommends pumping frequency to exceed no more than 90 days. Proper sizing is critical to achieving desired pump frequency.

## **TROUBLESHOOTING TIPS:**

Slower than usual sink drainage may indicate the need to pump/clean oil separator. To prevent problems, review building management practices found online or in our catalog.

Always take proper care to ensure a safe and healthy environment while cleaning interceptor. For best cleaning and maintenance service, call your local sewer and drain contractor.



OS-1500 Shown

ECO:

DESCRIPTION:

OIL SEPARATOR INSTALLATION, OPERATION AND MAINTENANCE GUIDE

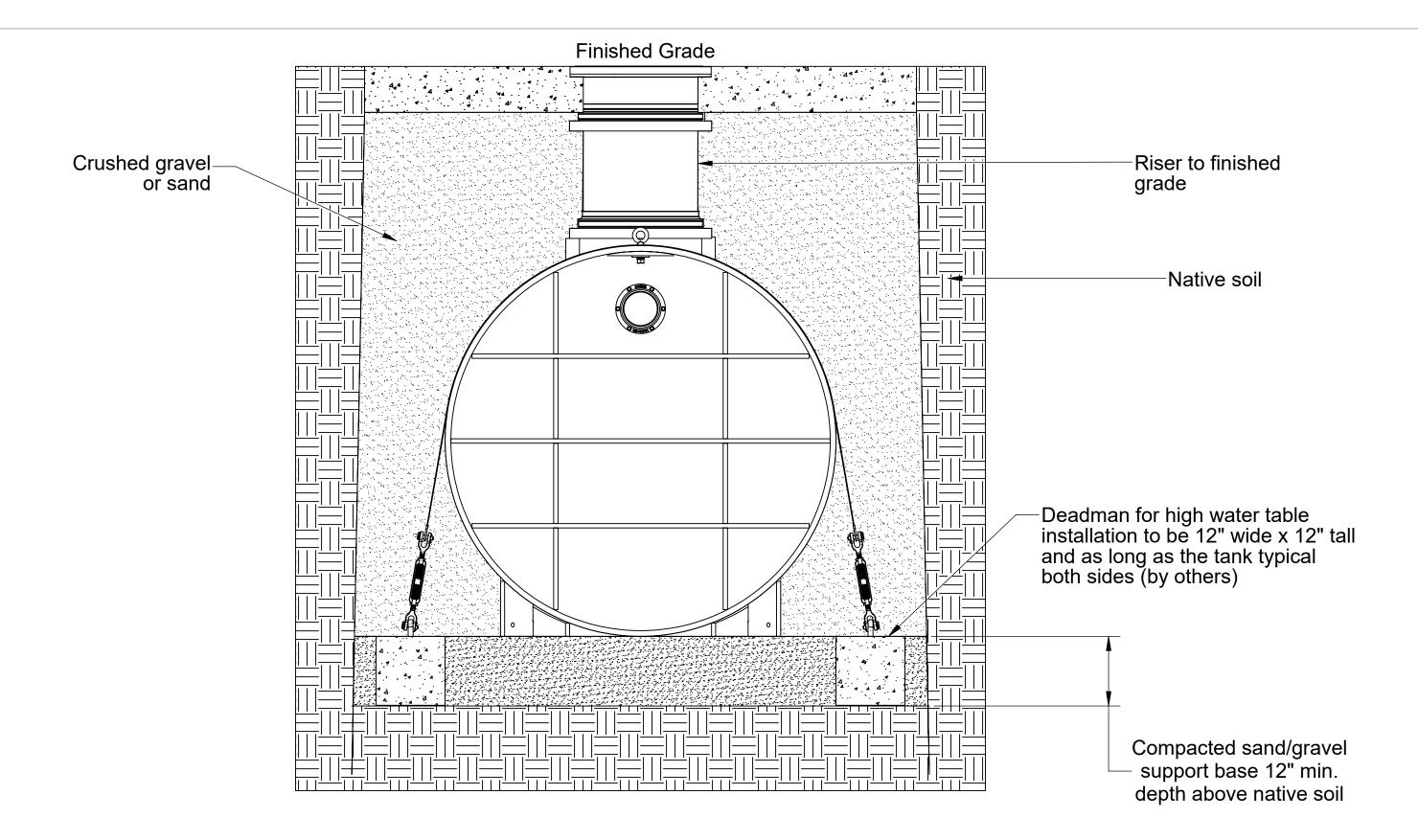
SHEET NUMBER: 1 of 3

**DWG BY:** MJ **DATE:** 10/28/2019 **REV:** 

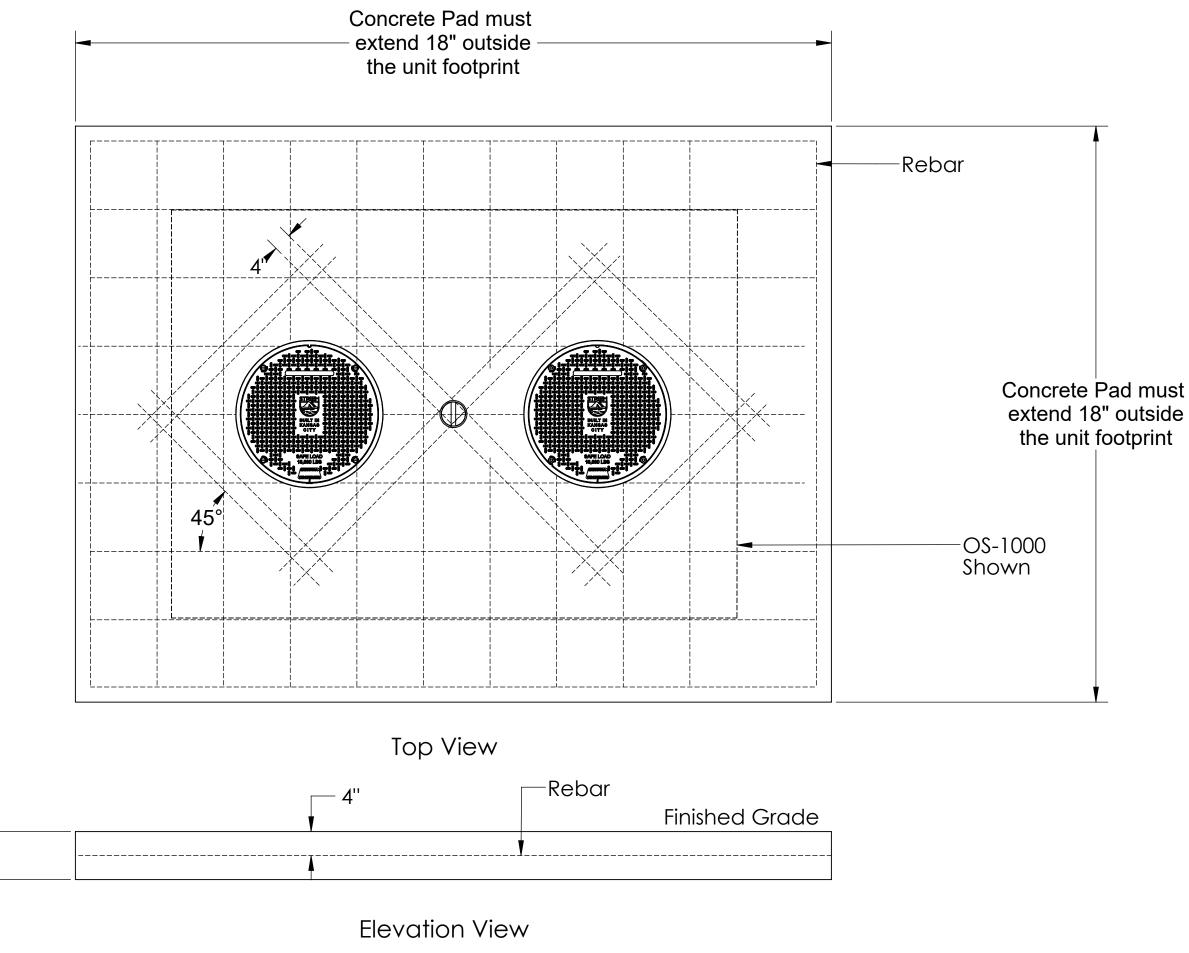
Striem
3100 Brinkerhoff
Kansas City, KS 66115
Tel: 913-222-1500
Fax: 913-291-0457
www.striemco.com

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### **EXCAVATION AND BACKFILL DETAIL**



**CONCRETE SLAB DETAIL** (OS-1000 Shown)

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#### **INSTALLATION INSTRUCTIONS**

- **EXCAVATION** Surrounding soil must be undisturbed soil or well compacted engineering fill
- Measure the width and length of the tank and excavate a hole that is a minimum of 18" greater than the tank on all sides.
   Depth of excavation shall be 12" deeper than tank bottom.
- 4. After the excavation is complete create a well compacted support layer of sand/gravel mixture so that ground supporting tank is a minimum of 12" above native soil.

#### **UNIT INSTALLATION**

- 1. Lower and center the unit into hole using Striem lifting lug kit (included). Do not use chains or accessways to move the unit.
- 2. Ensure the unit tops are level with finished grade.
- 3. All pipe penetrations to be sleeved or have slip connections.
- 4. Fill unit with water before backfilling to stablize unit and prevent float out during backfilling

#### **BACKFILLING & FINISHED CONCRETE SLAB**

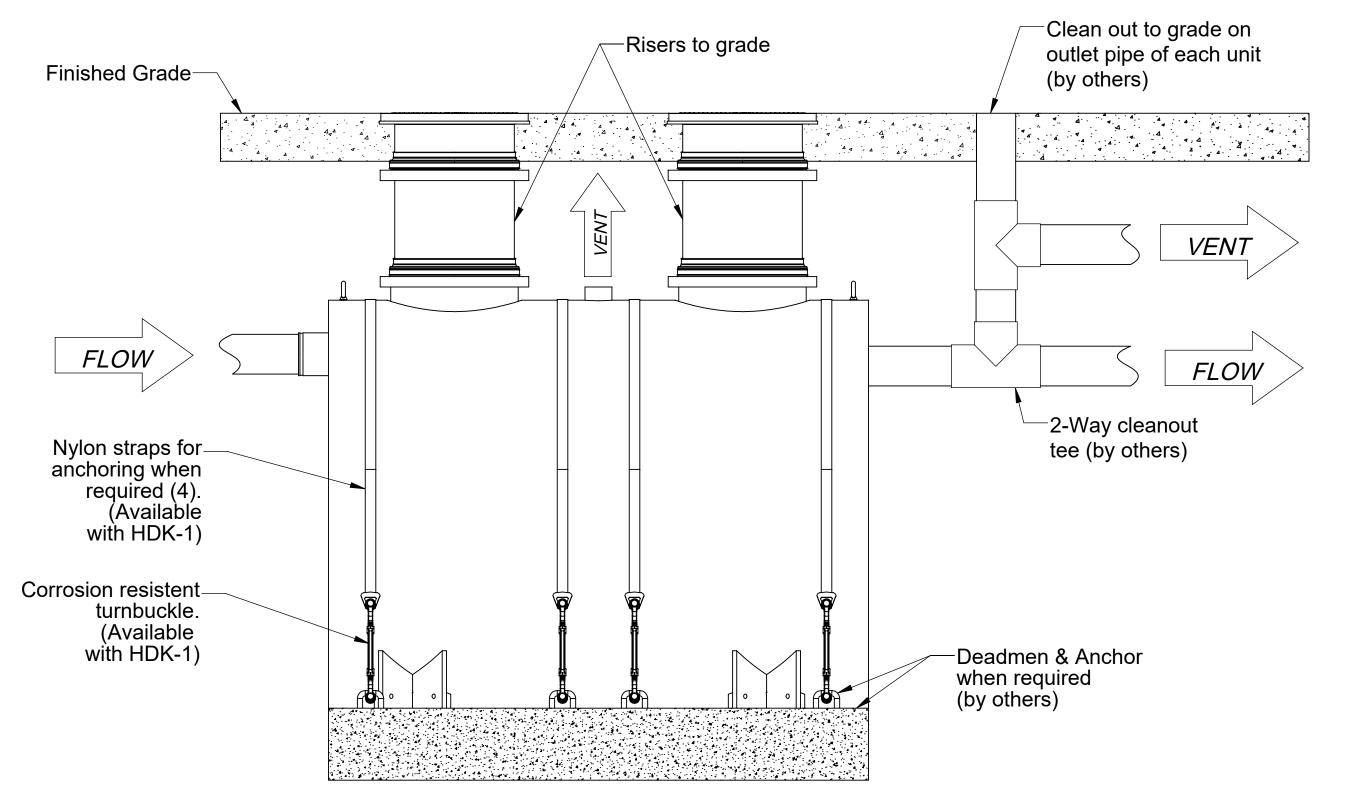
- Before backfilling and pouring of slab secure covers and risers (if necessary) to the unit.
   Backfill evenly all around tank using crushed aggregate material approximately 3/4" size rock, or sand, with no fines.
   When backfilling ensure backfill is worked under the unit using a probe to ensure the unit is fully supported.
   Place 6" aggregate base under slab. Aggregate should be 3/4" size rock, or sand, with no fines.
   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.
  6. Concrete to be 28 day compressive strength to 4000 PSI.
  7. NO. 4 rebar (∅ 1/2") grade 60 steel per ASTM A615: connected with tie wire.
  8. Rebar to be 2 1/2" from edge of concrete.

- 9. Rebar spacing 12" grid. 4" spacing around access openings.

#### **DEADMAN ANCHORING**

- Deadmen should be constructed according to the American Concrete Institute (ACI) code.
   Deadmen should be 12" wide x 12" tall and equal to the length of the entire unit.

- Each deadman should have 4 anchor points for connection to a 3,500 lbs. rated turnbuckle.
   Lay the deadmen parallel with the unit and ensure that it is outside the shadow of the tank.
   Nylon straps rated to 3,333 lbs. each should be connected to a turnbuckle on each side. Turnbuckles should be secured to the deadmen anchor points on each side of the tank such that the tank is held down.



# **SIDE VIEW DETAIL**

**DESCRIPTION:** Striem 3100 Brinkerhoff OIL SEPARATOR INSTALLATION, Kansas City, KS 66115 OPERATION AND MAINTENANCE GUIDE Tel: 913-222-1500 Fax: 913-291-0457 www.striemco.com **SHEET NUMBER:** 2 of 3 Made in the U.S.A ECO: **DWG BY:** MJ | **DATE:** 10/28/2019 | **REV:** 

STRIEM

#### Tools included (with base oil separator unit(s))

7/16" Nut driver tool/bit Silver permanent marker

#### **Tools Needed:**

Tape measure

Regular or cordless drill with 1/2" chuck

#### Tools needed if Riser(s) require cutting:

Jigsaw or Cordless circular saw or Reciprocating saw

#### Riser Assembly Instructions/Steps:

Once unit is set so that the pipe connections line up with jobsite piping, measure total riser height needed from top of cover to finished grade.

Select according risers needed based off Table 1

If risers are needed, remove covers from adapters and remove adapters from main unit by loosening upper clamp with included nut driver bit (lower band is factory set do not adjust or remove). On the floor near the unit, insert adaptor into first riser until it stops. If needed, insert bottom of first riser into top of second riser until it stops. You may need to tighten upper clamps during this step to keep risers from shifting. Adapter and riser(s) should sit level with each other. Removal of cover during this process will ease assembly.

From the top of the adapter, measure your needed total riser height downward to the sidewall of the riser. Then, add <u>6</u>". For example, if you need a 15-1/2" extension, you would measure down from the top of the adapter 21-1/2" (15-1/2" + 6" = 21-1/2"). See Figure 1.

Refer to Table1 to determine if, and where, any cuts need to be made. If a cut needs to be made, make a circular line around the sidewall of the riser with the included silver marker at your riser height <u>+dimension from step 5</u>. Using a jigsaw, circular saw or reciprocating saw, cut along your line. Discard/recycle the cutoff scrap.

Whether the riser needs to be cut or not, make another mark with the silver marker on the sidewall of the riser a distance of 4 INCHES above the edge just cut. If you did not make a cut (meaning your riser height + dimension from step 5 line was beyond the bottom edge of your riser), still mark the sidewall of the riser 4 INCHES above where your riser height + dimension from step 5 line would have been. DO NOT cut this new line. Once the riser is installed into the main unit, this new line will end up at the top of the gasket and will aid in re-assembly. See Figure 2.

IMPORTANT: Before the next step: Refer to sheet 1 of the installation instructions for leak/water testing procedures.

Take riser(s) and adapters apart to reduce the weight during installation. Wipe all sidewalls and inside of gasket with a damp cloth to remove jobsite dust/debris. Install components into the main unit starting from the lowest (cut) riser and working your way toward the finished floor level. Upper clamps at each gasket need to be loosened or removed to aid in assembly. Once riser(s)/adapter is inserted into gasket, upper clamp can be tightened.

Verify that the bottom of the lowest riser is protruding at least 2-1/2" but no more than 4" into the main unit from the top of the gasket. Your mark from step 7 should be at the top edge of the gasket on the main unit. If measurements were made correctly, this should happen automatically. See figure 3.

If tilting of the adapter is required to be flush with finished grade, it must be done AFTER all clamps have been tightened with riser(s)/adaptor in a vertical and level position. Tilting is achieved by using the flexibility of the gasket. If tilting is done before clamps are tightened, a perfect gasket seal may be compromised. Striem recommends tilting only the adapter versus the entire riser assembly to make sure your riser height is maintained.

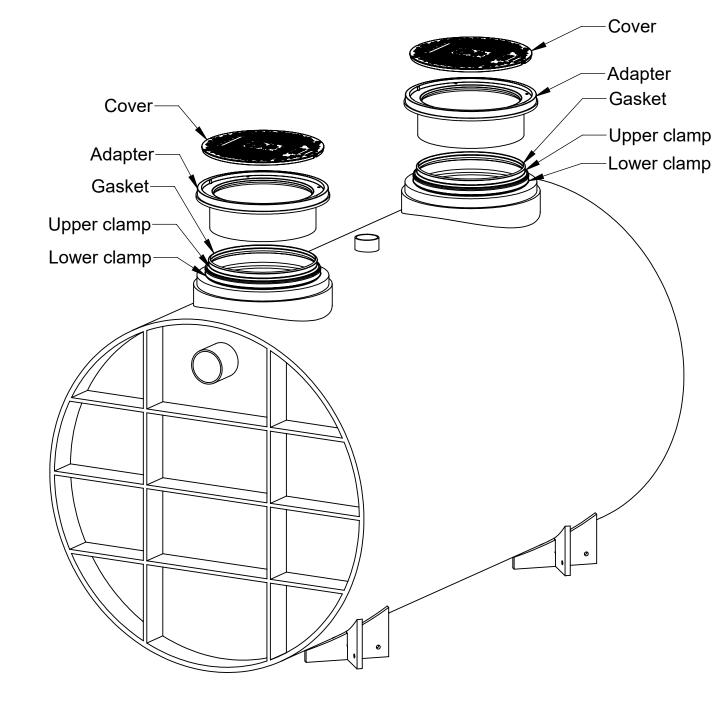
Tighten all clamps to a minimum of 5 and a maximum of 8 ft lbs. of torque. Use the same torque as you would tighten a rubber no-hub coupling.

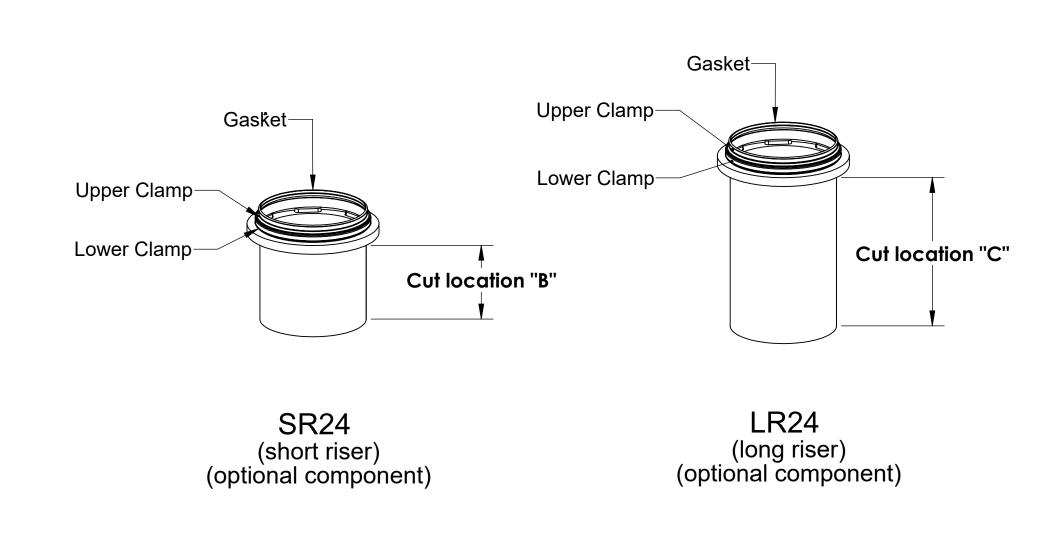
The adapter must be adjusted upward to achieve certain extension heights. See Table 1

If jobsite riser height conditions change after the above steps have been completed, there may still be room for vertical adjustment in both directions. As long as minimum and maximum overlaps are maintained (see Figure 3), the adapters/risers can be adjusted/cut as many times as necessary. Please follow these steps from the beginning to ensure the proper overlaps are maintained.

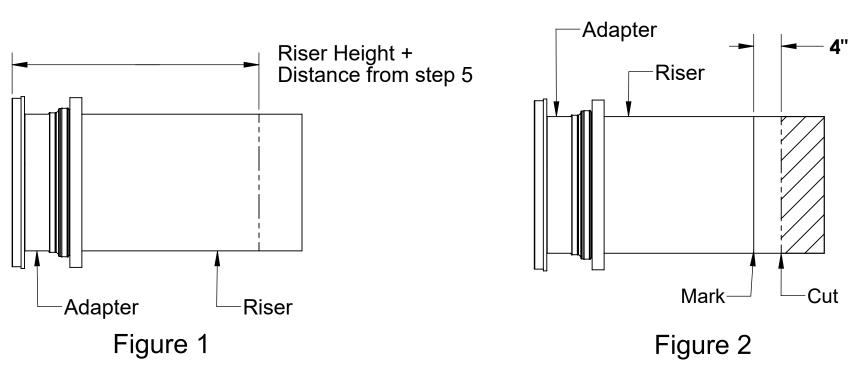
Call Striem with questions or suggestions @ 1-913-222-1500 Customer Service Hours: 8 AM-5 PM CST

# TeleGlide Riser (24 Series) Installation Guidelines (OS-750, OS-1000 & OS-1500)





# **Standard OS Unit**



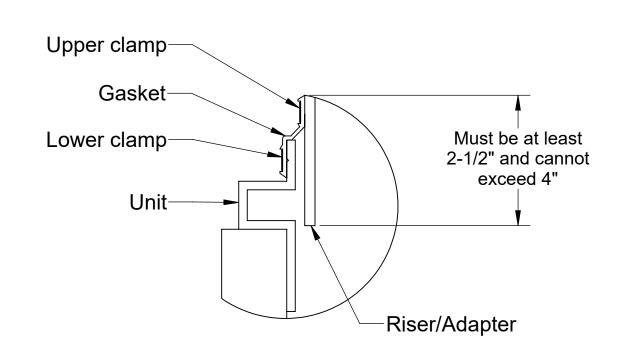


Figure 3

Table 1			
Riser Height Needed	Riser P/N Needed	Riser Qty. Needed	Location(s)
0" to 6"	None	0	None
>6" to 8-1/4"	SR24	2	a,b
>8-1/4" to 19-3/4"	SR24	2	b
>19-3/4" to 24"	SR24	2	None <sup>1</sup>
>24" to 35"	LR24	2	С
>35" to 39"	LR24	2	None <sup>2</sup>
>39" to 43"	SR24	4	b
>43" to 51-1/2"	SR24	2	С
	LR24	2	
>51-1/2" to 58"	SR24	2	None <sup>3</sup>
	LR24	2	
>58" to 66-1/2"	LR24	4	С
> / / 1 /0"   - 70"	1004	4	Nan a <sup>4</sup>

- |>66-1/2" to 72" LR24 None⁻
- 1. Adjust adapter upwards to reach 22" to 24"
- 2. Adjust adapter upwards to reach 37" to 39"
- 3. Adjust adapter upwards to reach 56" to 58"
- 4. Adjust adapter upwards to reach 70" to 72"

# **DESCRIPTION:**

OIL SEPARATOR INSTALLATION, OPERATION AND MAINTENANCE GUIDE

**SHEET NUMBER:** 3 of 3

**DWG BY:** MJ | **DATE:** 10/28/2019 | **REV:** ECO:

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