

LAB BASIN - LARGE EXTERIOR UNITS  
(Models LB-750, LB-1000, and LB-1500 )

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

**Sheet Descriptions**

Sheet #1 - Series overview and Warranty information  
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.**

Base Unit: 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 water tested for leaks prior to shipment from the factory.

TeleGlide Riser System: If required by local code, the riser system may be leak/seal tested similar to the base unit. CAUTION: 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.

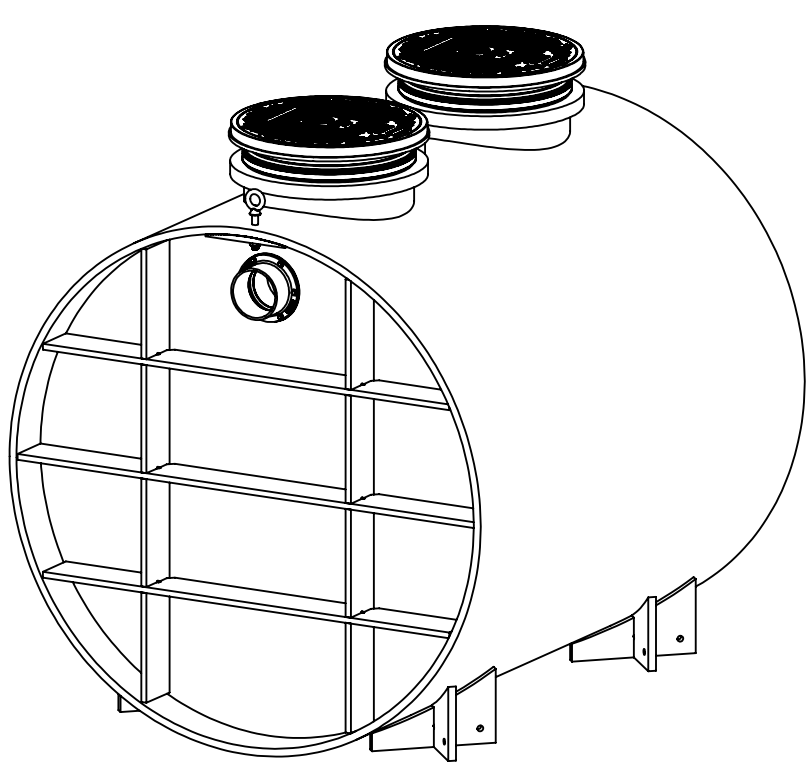
**Lifetime Warranty**

Effective March 2nd, 2015, Striem represents and warrants that HDPE and 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.

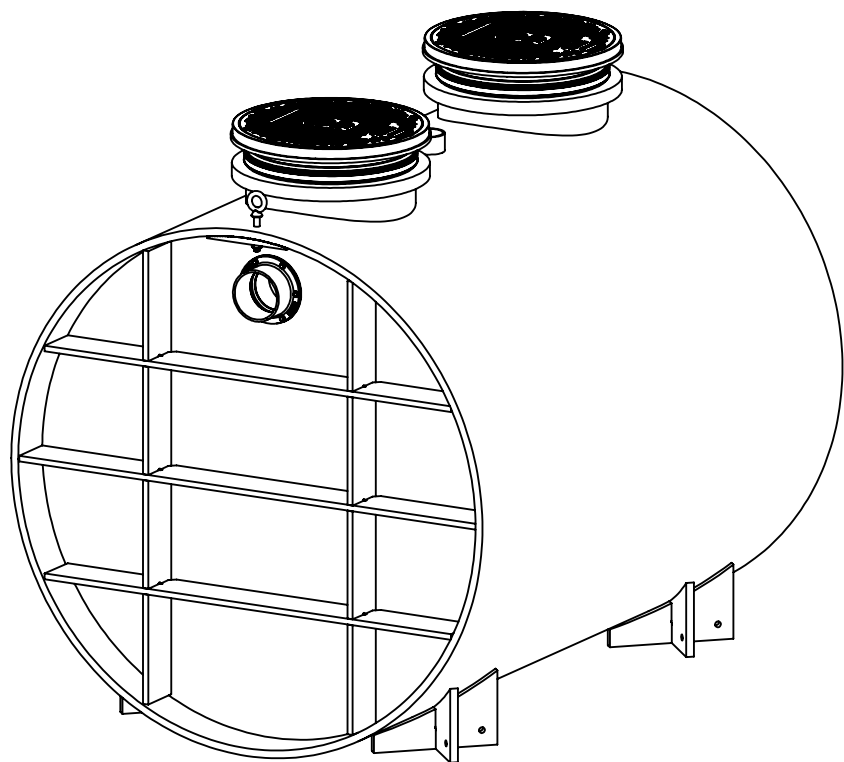
This warranty does not cover damage caused by the products' normal usage, or wear and tear, nor does it cover damage from naturally occurring phenomenon, including, but not limited to UV, freeze-related damage, or natural disasters. This warranty does not cover the purchaser's cost of routine maintenance 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.

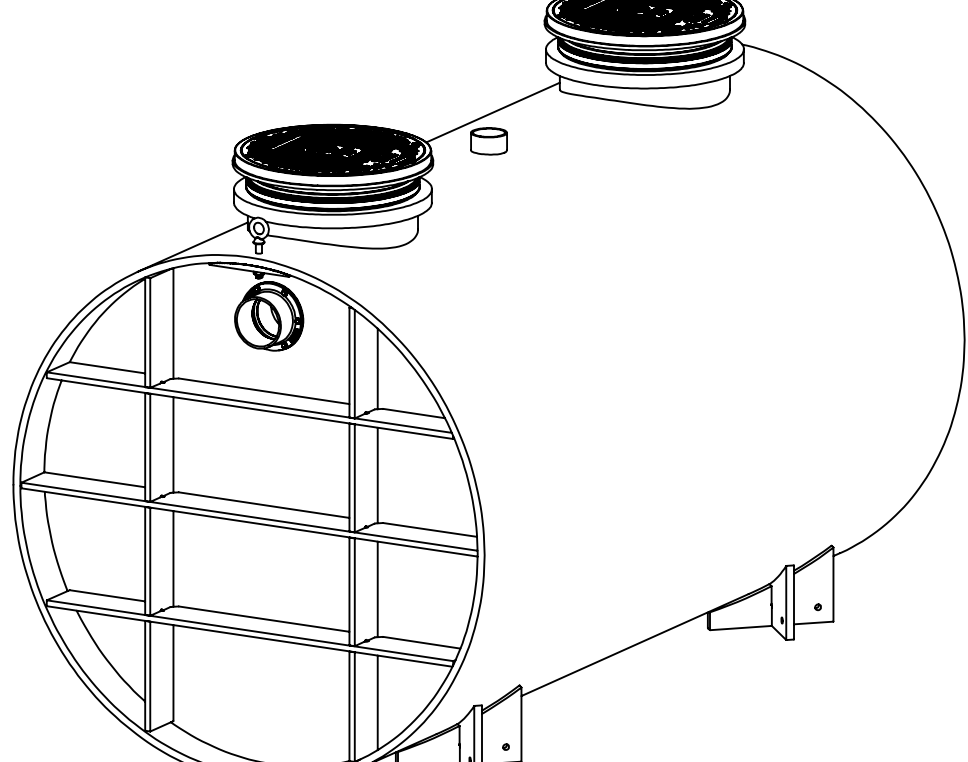
This warranty is the purchaser's sole and exclusive remedy, and acceptance of this exclusive remedy is a condition of the contract for the purchase of these products. In no event shall Striem be liable for any incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, 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.



**LB-750**  
750 gallons



**LB-1000**  
1,000 gallons



**LB-1500**  
1,500 gallons



**OPERATION:**

Striem Lab Basin™ series tanks are designed to neutralize or dilute (based on specific requirements) chemical wastewater and bring it to a more neutral state, rendering it acceptable for local wastewater treatment facilities. The most common neutralization situation occurs when acidic waste is filtered through a neutralizing media, most often a specific size and composition of limetsone.

Wastewater flows through the inlet connection and is forced to the bottom of the unit via inlet invert pipe or diptube. For neutralization tanks, the wastewater is then filtered through a neutralizing agent (Limestone with a Calcium Carbonate level of 90% or better is most common) and then exits the chemical waste tank though the outlet. For dilution tanks, intermittent chemical waste moves through a majority water solution from previous batches and then exits the chemical waste tank through the outlet.

**MAINTENANCE**

1. Remove cover(s).
2. For best maintenance contact a professional sewer and drain contractor. Proper maintenance is essential to keeping Lab Basins™ in proper working order. Debris entering the tank from sink or lab station may plug the invert or foul the neutralizing agent. If limestone is to be used as a neutralizing agent, the limestone will be depleted as it works to neutralize the incoming effluent. Once the limestone is depleted, the tank should be cleared of sludge, sediment, and debris before adding new neutralizing agent. **A qualified professional should be responsible for analysis of effluent, inspection, maintenance, and replacement of neutralizing agent.**
3. Observe a regular schedule of maintenance. Start by inspecting the new system every month to three months until a proper schedule can be established. Frequency will depend on tank capacity and content of chemical waste passing through the system.
4. Debris and sludge must be cleaned out periodically to allow free flow of water through tanks. If it is determined that the Lab Basin™ tank or system will encounter large amounts of debris or sediment, specify a Striem Solids Interceptor.
5. As the limestone is depleted, the tank should be cleared of sludge, sediment, and debris before new neutralizing agent is added. When limestone begins to foul, it often dissipates into a muddy substance and the level of the stone will begin to recede. When the stone is mostly fouled, the tank should be flushed with fresh water, the fouled debris removed from the tank, the tank cleaned, and new limestone added.

**Overview**

Striem Lab Basin™ tanks are designed to dilute or neutralize corrosive liquid waste, making it acceptable for the sanitary sewer system. Striem Lab Basin™ tanks are made of High Density Polyethylene (HDPE) and can be customized to meet specifier requirements.

**Venting**

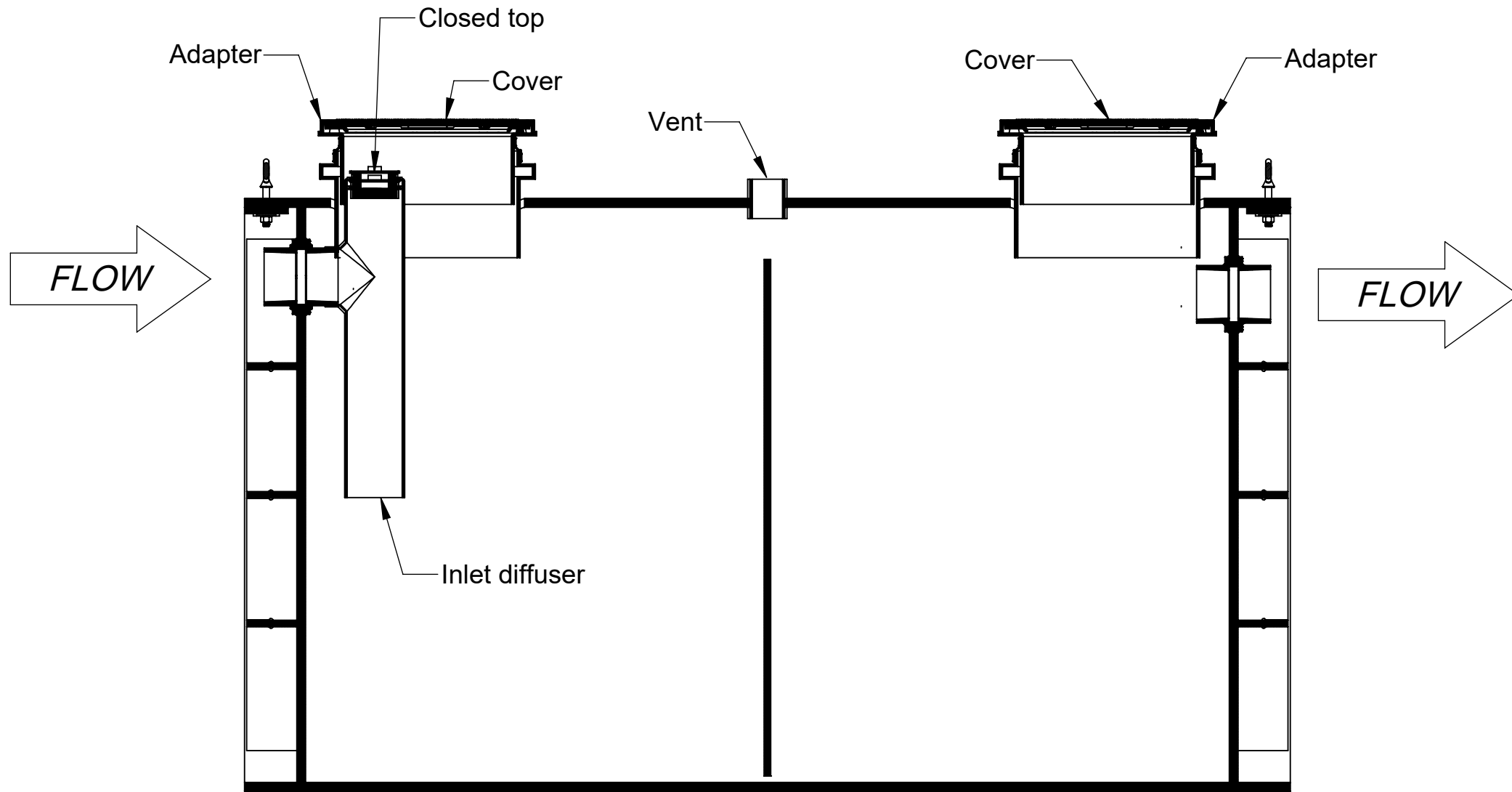
The use of any Lab Basin™ tank can allow the buildup of volatile gases whin the tank. Striem recommends that each Lab Basin™ tank be vented independently from the sanitary vent system to allow removal of these gases.

**Limestone**

When using limestone as a neutralizing agent, it is essential to use the correct size and type of limestone. Striem recommends limestone that is 2" to 3" in size, and has a Calcium Carbonate content of 90% or greater (Striem can supply limestone that meets these requirements).

**TROUBLESHOOTING TIPS:**

Slow drainage is course for immediate inspection! Call a professional contractor for assistance. Call Striem for details on tank specifications.



LB-1500 Shown

**DESCRIPTION:**

LAB BASIN INSTALLATION,  
OPERATION AND MAINTENANCE GUIDE

**SHEET NUMBER:** 1 of 3

**DWG BY:** MJ

**DATE:** 04/24/2020

**REV:**

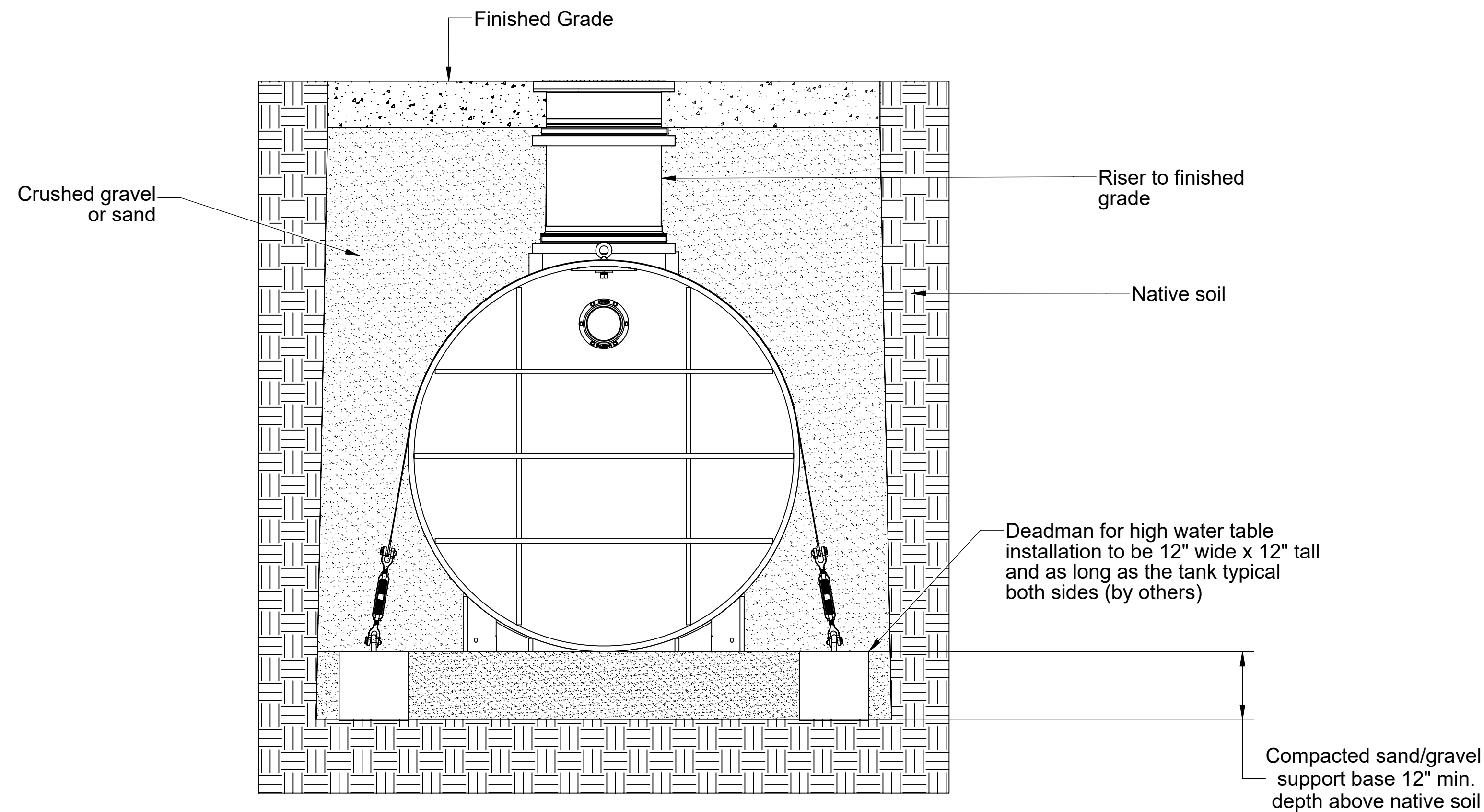
**ECO:**

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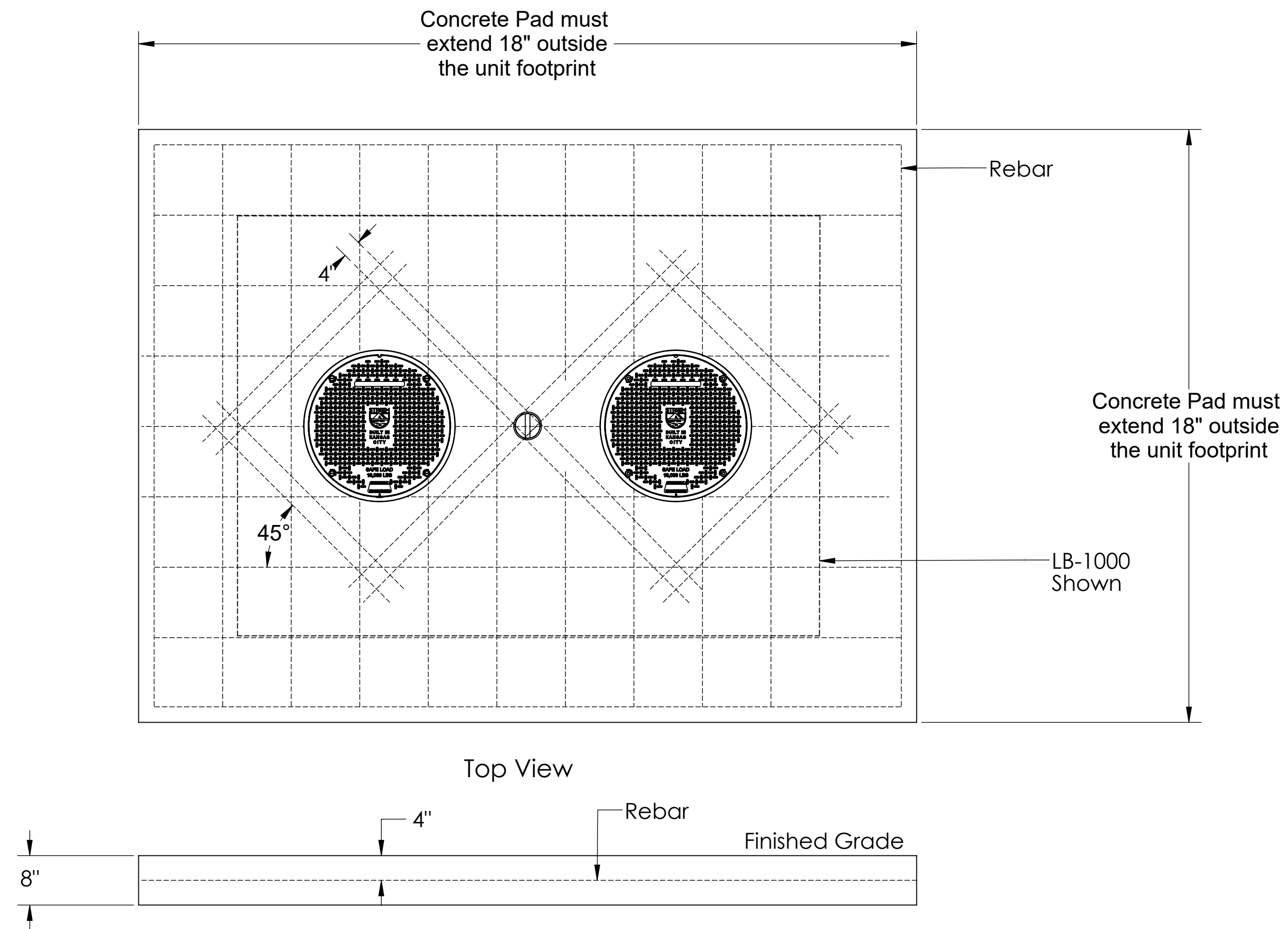
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**EXCAVATION AND BACKFILL DETAIL**



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

## INSTALLATION INSTRUCTIONS

### EXCAVATION

1. Surrounding soil must be undisturbed soil or well compacted engineering fill.
2. 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.
3. 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

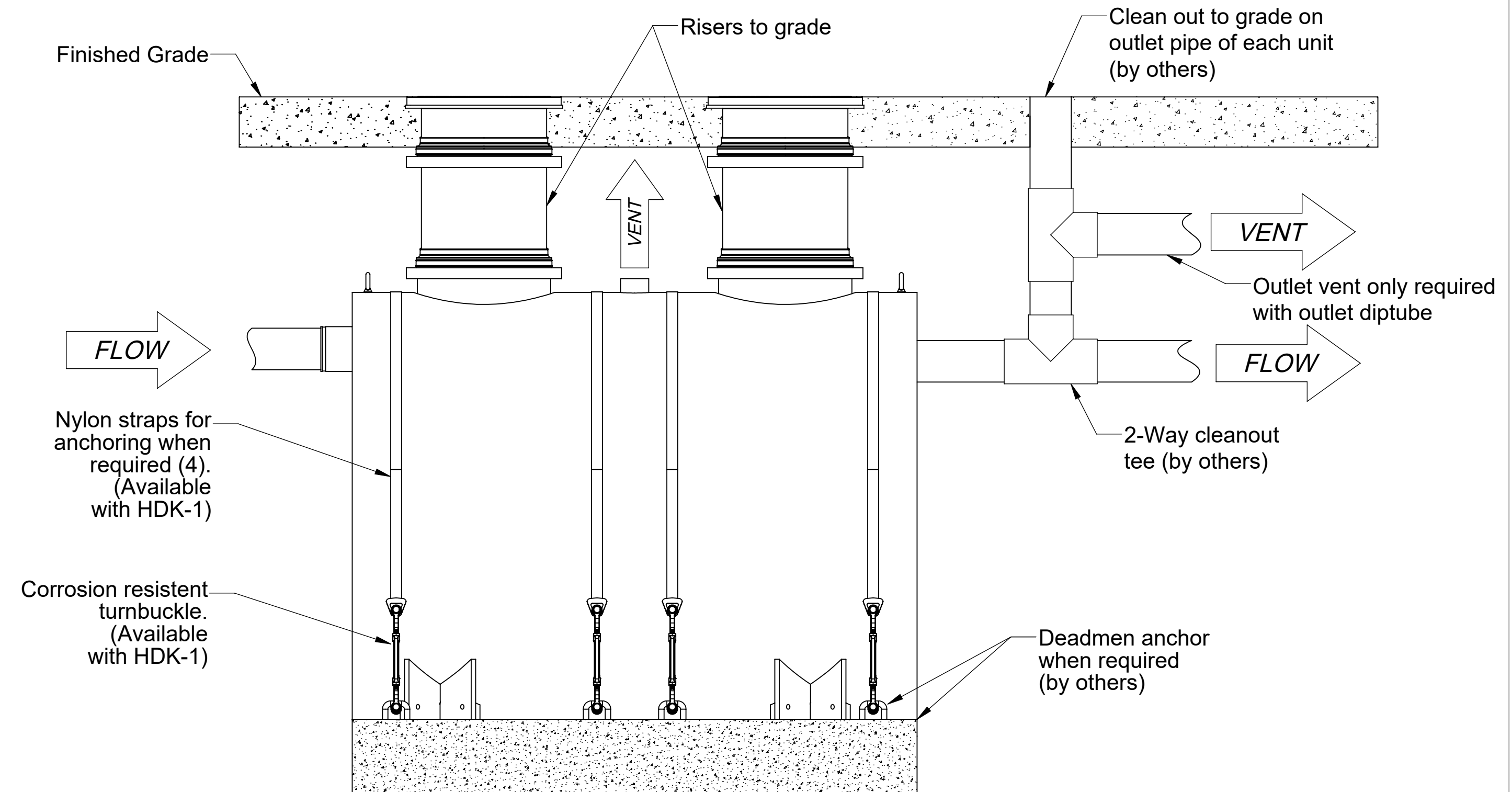
1. Lower and center the unit into hole using Striem lifting lug kit (included). Do not use chains or accessways to move the unit.
2. Ensure the unit tops are level with finished grade.
3. All pipe penetrations to be sleeved or have slip connections.
4. Fill unit with water before backfilling to stabilize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

### BACKFILLING & FINISHED CONCRETE SLAB

1. Before backfilling and pouring of slab secure covers and risers (if necessary) to the unit.
2. Backfill evenly all around tank using crushed aggregate material approximately 3/4" size rock, or sand, with no fines.
3. When backfilling ensure backfill is worked under the unit using a probe to ensure the unit is fully supported.
4. Place 6" aggregate base under slab. Aggregate should be 3/4" size rock, or sand, with no fines.
5. 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 ( $\phi$  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.

### Deadmen Anchoring

1. Deadmen should be constructed according to the American Concrete Institute (ACI) code.
2. Deadmen should be 12" wide x 12" tall and equal to the length of the entire unit.
3. Each deadman should have 4 anchor points for connection to a 3,500 lbs. rated turnbuckle.
4. Lay the deadmen parallel with the unit and ensure that it is outside the shadow of the tank.
5. 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:

LAB BASIN INSTALLATION,  
OPERATION, AND MAINTENANCE GUIDE

SHEET NUMBER: 2 of 3

DWG BY: MJ

DATE: 04/24/2020

REV:

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

Tools included (with base neutralization tank 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:

1. Once the unit is set so that the pipe connections line up with jobsite piping, measure the total riser height needed from the top of the cover to finished grade.
2. Select risers needed based off Table 1.
3. If risers are needed, remove the covers from the adapters and remove the adapters from the main unit by loosening the upper clamp with the included nut driver bit (lower band is factory set, do not adjust or remove). On the floor near the unit, insert the adapter into the first riser until it stops. If needed, insert the bottom of first riser into the top of the second riser until it stops. You may need to tighten the upper clamps during this step to keep the risers from shifting. Adapter and riser(s) should sit level with each other. Removal of the cover during this process will ease assembly.
4. From the top of the adapter, measure your needed total riser height downward to the sidewall of the riser. Then, add 6". 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.
5. 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 +dimension from step 5. Using a jigsaw, circular saw or reciprocating saw, cut along your line. Discard/recycle the cutoff scrap.
6. 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.
7. IMPORTANT: Before the next step: Refer to sheet 1 of the installation instructions for leak/water testing procedures.
8. 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.
9. 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.
10. 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.
11. 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.
12. The adapter must be adjusted upward to achieve certain extension heights. See Table 1
13. 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.

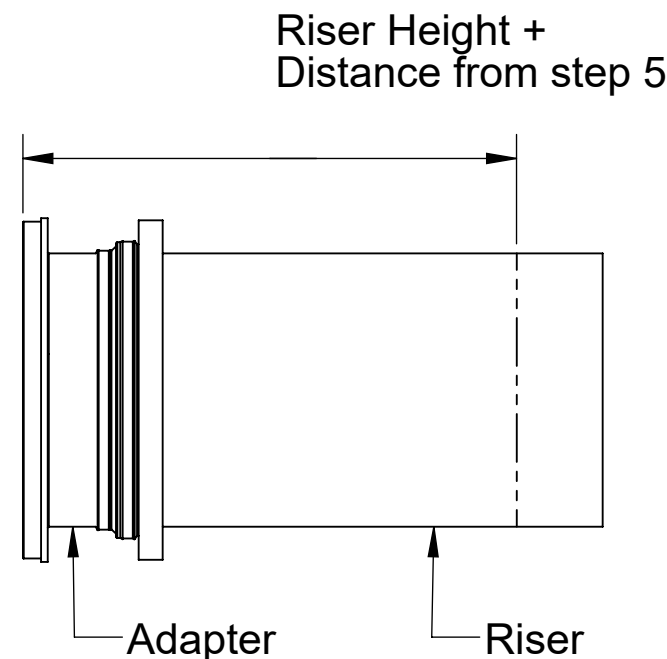
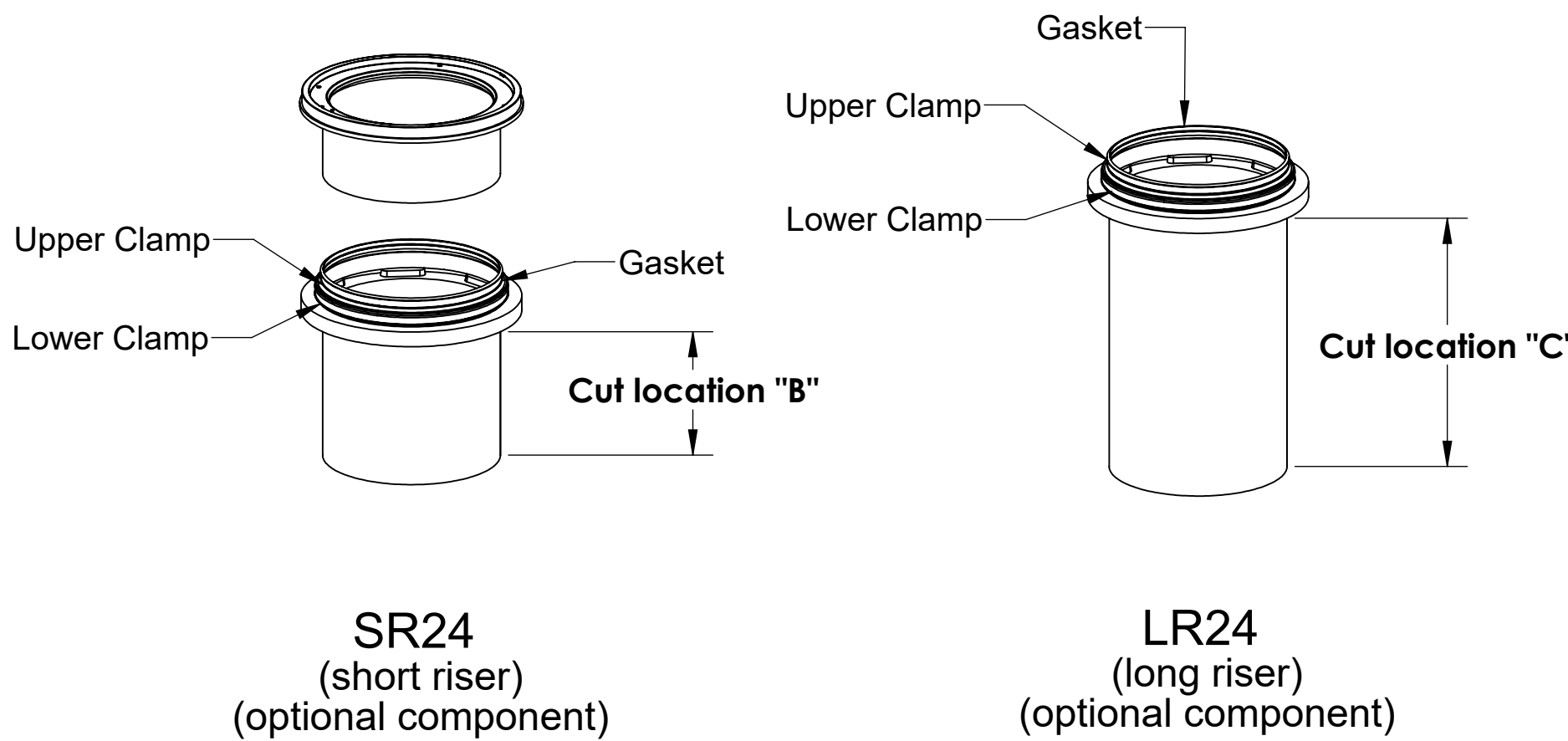
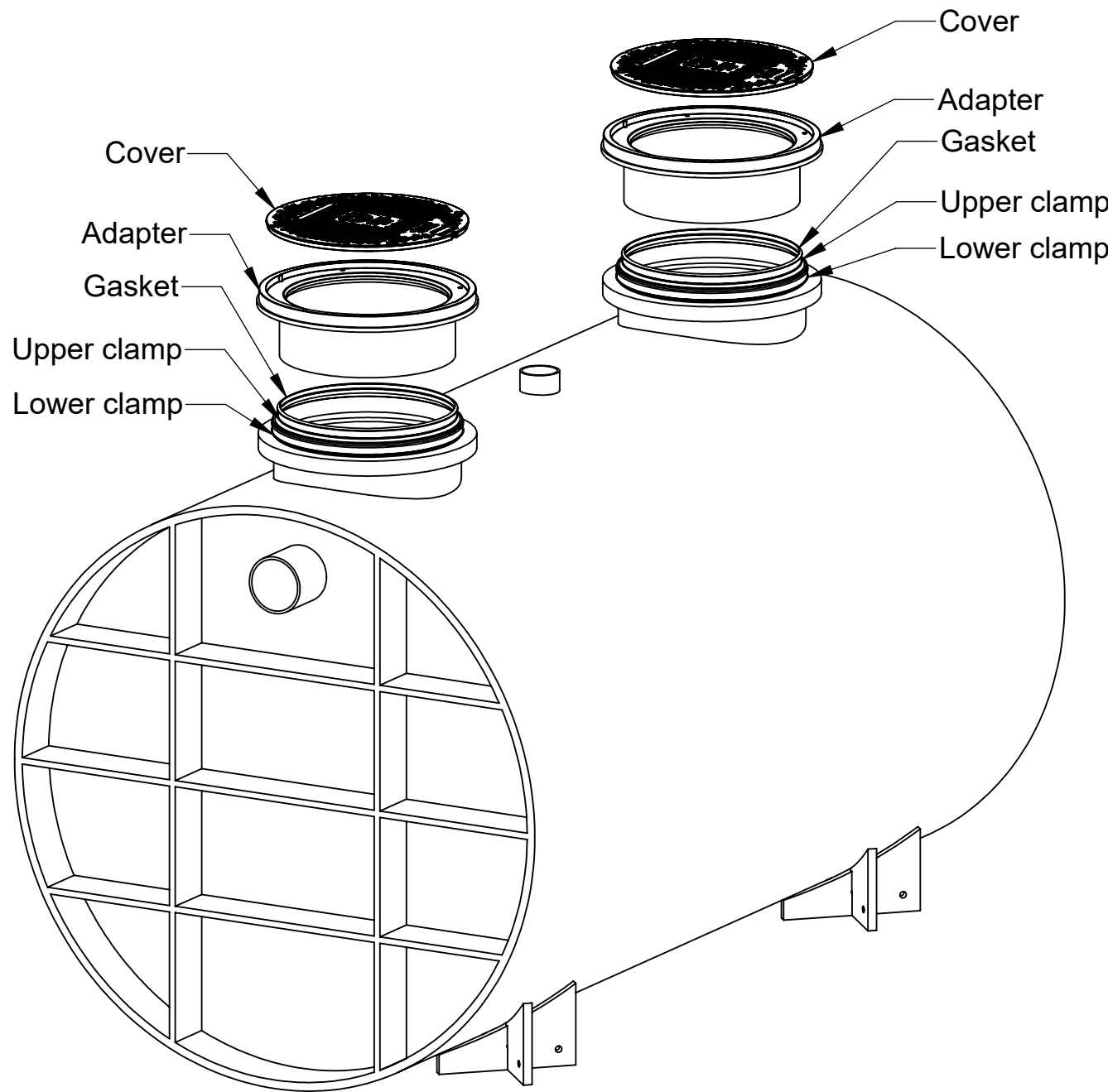


Figure 1

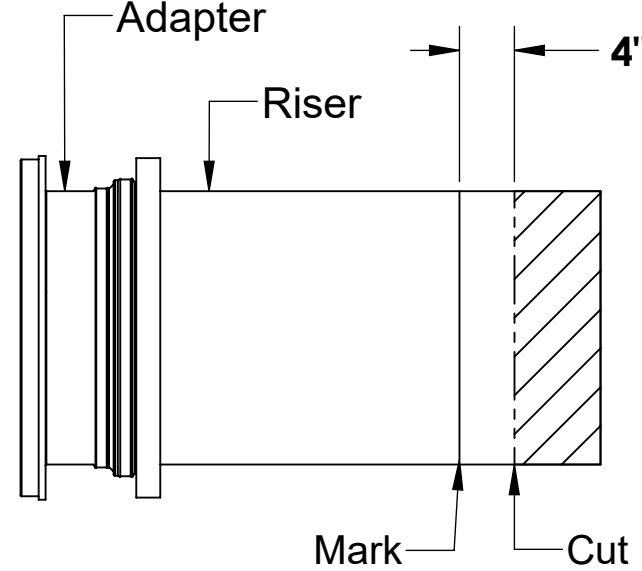


Figure 2

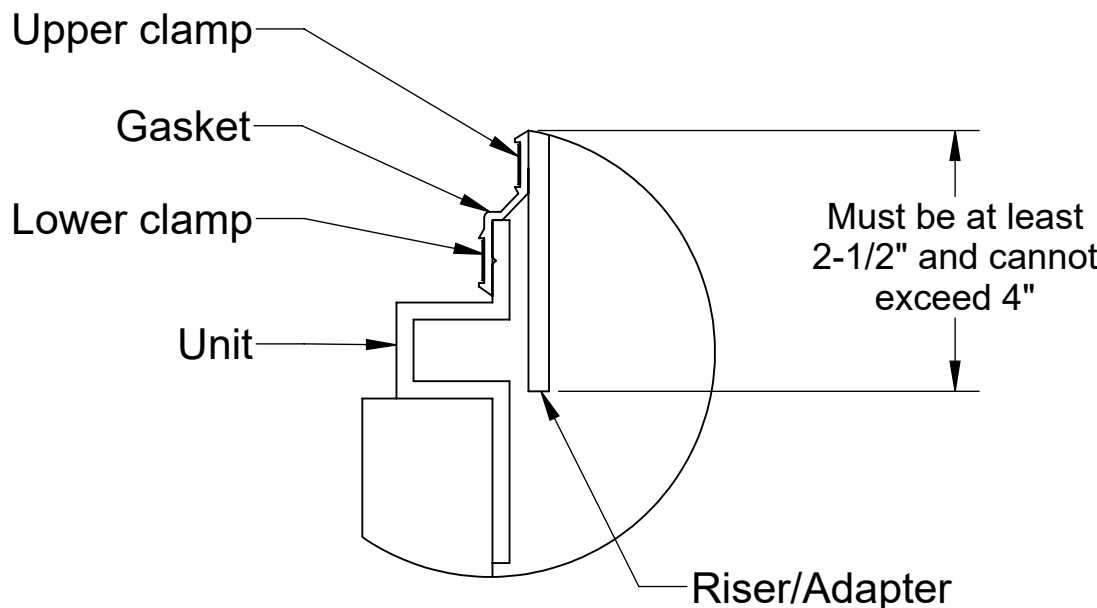


Figure 3

Table 1

Riser Height Needed	Riser P/N Needed	Riser Qty. Needed	Cut 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	c
>35" to 39"	LR24	2	None <sup>2</sup>
>39" to 43"	SR24	4	b
>43" to 51-1/2"	SR24	2	c
	LR24	2	
>51-1/2" to 58"	SR24	2	None <sup>3</sup>
	LR24	2	
>58" to 66-1/2"	LR24	4	c
>66-1/2" to 72"	LR24	4	None <sup>4</sup>

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"

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

DESCRIPTION:

LAB BASIN INSTALLATION,  
OPERATION, AND MAINTENANCE GUIDE

SHEET NUMBER: 3 of 3

DWG BY: MJ

DATE: 04/24/2020

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