

Department of Safety and Professional Services Division of Industry Services Plumbing Product Review 4822 Madison Yards Way P.O. Box 7162 Madison, Wisconsin 53707-7162 Phone 608-266-2112 Web http://dsps.wi.gov Email dsps@wisconsin.gov TTY: Contact Through Relay

Governor Tony Evers Dan Hereth, Secretary

April 25, 2024

VPC Global 28310 Livingston Ave Valencia, CA 91355

Conditionally APPROVED DEPT. OF SAFETY AND PROFESSIONAL SERVICES **DIVISION OF INDUSTRY SERVICES**

Goshua Rowley

 Re:
 Description:
 Sewage Tanks, Polyethylene (HDPE)

 Manufacturer:
 Valencia Pipe Company

 Product Name:
 Single compartment With or Without Baffle

 Septic Tanks: 1000 and 1500

SEE CORRESPONDENCE

Model Number(s): 87-41718 1000 Gallon One Compartment Septic Tank, 87-41720 1000 Gallon Two Compartment Septic Tank, 87-41758 1500 Gallon One Compartment Septic Tank, 87-41760 1500 Gallon Two Compartment Septic Tank

eSLA PTO No.: PP-042400022-PTOPHTC

The specifications and/or plans for these sewage tanks have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 384.25 (7) (b) Wis. Adm. Code based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of April 2029.

This approval is contingent upon compliance with the following stipulation(s):

- These tanks shall be installed, maintained and used in strict accordance with the manufacturer's published instructions, Chapters 381-387 Wis. Adm. Code and this product approval. If there is a conflict between the manufacturer's instructions and the Wis. Adm. Code or this Plumbing Product Approval, then the Wis. Adm. Code and this Plumbing Product Approval shall take precedence.
- 2. For each installation of these tanks, DSPS POWTS plan approval shall be obtained from the department's Private Sewage Section or the appropriate agent county.
- 3. A sanitary permit shall be obtained in accordance with s. SPS 383.21 Wis. Adm. Code, from the county or other local authority having jurisdiction for each proposed installation of these tanks.

No person shall purchase or install a private on-site wastewater treatment system unless the owner of the property on which the system is to be installed holds a valid sanitary permit issued under § 145.19.

No person shall sell at retail, as defined under § 100.201 (1) (d), a septic tank for installation in this state unless the purchaser holds a valid sanitary permit issued under § 145.19.

4. Campgrounds shall obtain required permits from the Wisconsin Department of Health Services under HFS 178 prior to installing or using these tanks.

- 5. These tanks shall be installed by persons holding the proper license or registration in accordance with Wis. Stats. § 145.
- 6. Commercial food processing, food production, food service, restaurants, taverns and similar establishments which may generate greases, fats, oils or similar substances; shall have state-approved grease interceptors installed upstream of septic tanks serving these tanks in accordance with s. SPS 382.34 Wis. Adm. Code.
- 7. The placement of these tanks shall conform to Table SPS 383.43-1 Wis. Adm. Code.
- 8. Drain, waste and vent piping used to install these tanks shall conform to s. SPS 384.30 (1), (2) and (3) Wis. Adm. Code.
- 9. Cleanouts shall be installed in drain piping associated with the installation of these tanks in accordance with s. SPS 382.35 Wis. Adm. Code.
- 10. All joints shall be made watertight. These tanks shall be capable of maintaining an internal water pressure of 5 psig for 60 minutes with no loss of water pressure.
- 11. These tanks shall be labeled as required by s. SPS 384.25 (11) (c) Wis. Adm. Code.
- 12. Tank contents removed shall be treated as septage and disposed of in accordance with NR 113 Wis. Adm. Code.
- 13. This approval does not include consideration of these tanks for any fresh/potable water uses.
- 14. The manufacturer must keep at the manufacturing plant a set of plans and specifications for these tanks bearing the department's stamp of approval. The plans and specifications must be open to inspection by an authorized representative of the department.
- 15. These tanks shall be designed to withstand the pressures to which it will be subjected.
- 16. These tanks shall be fitted with locking manhole covers in accordance with s. SPS 384.25 (7) (h) Wis. Adm. Code. The manhole cover must be secured to the riser using screws which are not standard or Philips head to be considered an effective locking device.
- 17. These tanks shall bear warning labels, that are visible after installation, that conform to s. SPS 384.25 (8) Wis. Adm. Code.
- 18. Backfill for these tanks shall:
 - a. be comprised of rock-free flowable native soil or 100% sand; and b. be tamped into place.
- 19. Bedding for these tanks shall:
 - a. be \geq 6-in. for soil terrain;
 - b. $be \ge 12$ -in. for rock terrain;
 - c. be leveled and compacted;
 - d. be comprised of sand or rock-free flowable native soil.
- 19. The following are approved for use with these tanks:
 - a. manholes with an inside diameter of 20 in.
 - b. 4-in. PVC inlet and outlet EPDM gasketed sanitary tees.
 - c. prefabricated manhole extensions and lid risers.
- 20. These tanks shall be anchored in accordance with s. SPS 383.43 (8) (g) Wis. Adm. Code when installed in areas subject to saturated soil conditions.

21. These tanks shall be protected from freezing in accordance with s. SPS 383.43(8)(c) Wis. Adm. Code.

Tank	Specifications				
	Model	Liquid Level (in.)	Gal./in.⁵	Gal./day♦	Max. Depth of Bury (in.)
	1,000	44.5	-	450	≥ 6 - ≤ 30
	1,500	53	-	674	≥ 6 - ≤ 30
	= Based on a 3	-vr. Service Interval for Residential V	Vastewater, a =		

 Based on a 3-yr. Service interval for Residential Wastewater. a -Holding capacity at inlet liquid level. b = Approx., the gal./in. varies

with liquid level. See attached drawings.

Technical notations:

- a. Manufacturer's website: https://www.valenciapipe.com/brands/vpc-tanks/products
- b. These tanks are only approved as septic, or septic/septic. Center wall is not water tight.
- c. Tank must be filled prior to complete backfill and must be refilled immediately upon pumping.

The department is in no way endorsing these tanks or any advertising and is not responsible for any situation which may result from their use.

Sincerely,

Joshua Rowley POWTS Product Reviewer POWTS Plan Reviewer Division of Industry Services 715-634-5124



THE CONSULTING BUREAU INC

30 Wall Street, 8th FL Office 813 New York, NY10005

Tell: 605-690-9946

Ali@consultingbureau.org

Engineerfny@gmail.com

April 20, 2024

To: Valencia pipe company 28305 Livingston Ave Valencia, CA 91355 United States



Subject: Documentation of the total liquid capacity and tank volumes calibrated in one-inch increments, (for septic tank, size 1000 gallon)

Description:

- A gradation of standards will be created for each inch linking the level of the water surface inside the tank and the volume of water inside it.
- The volume of water inside the tank was calculated using SolidWorks when the water level was only one inch.
- The previous step was repeated for each two-inch water level and the water volume was calculated again and so on until we obtained a set of values for water heights and volumes.
- In the table there is a third column of values that contains the amount of increase in the volume of water at this height compared to the previous height.
- After that, a curve was drawn between the height of the water in the tank and the volume of water inside it to further clarify the table data.
- Another curve was drawn between the height of the water in the tank and the amount of volume increase in this step over the previous step in the gradual process.

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Data:

Height: 58 inch

Width: 60 inch

Length: 100.64 inch

Thickness: 0.315 inch

Goals:

Obtain a scale between the water level in the tank and the volume of water inside it (calibrated in one-inch increment)

Here is the table containing the columns:

- \checkmark The first contains the water rising inside the tank by an increment of one inch
- \checkmark The second contains the volume of the tank at the corresponding height in the previous column
- \checkmark The third contains the amount of increase at this height over the previous height.





	Liquid Volume	Volume Increment per inch increment				
Water level with one inch increment	inside the tank	in water level				
	(gallon)					
1.00	7.03	7.03				
2.00	18.07	9.04				
3.00	30.73	10.24				
4.00	50.45	12.61				
5.00	71.00	14.20				
6.00	92.05	15.34				
7.00	113.42	16.20				
8.00	134.98	16.87				
9.00	156.68	17.41				
10.00	178.48	17.85				
11.00	200.40	18.22				
12.00	222.42	18.54				
13.00	244.54	18.81				
14.00	266.70	19.05				
15.00	289.04	19.27				
16.00	311.42	19.46				
17.00	333.88	19.64				
18.00	356.42	19.80				
19.00	379.03	19.95				
20.00	401.69	20.08				
21.00	424.35	20.21				
22.00	447.00	20.32				
23.00	469.66	20.42				
24.00	492.31	20.51				
25.00	514.96	20.60				
26.00	537.61	20.68				
27.00	560.25	20.75				
28.00	582.91	20.82				
29.00	605.66	20.88				
30.00	628.69	20.96				
31.00	651.71	21.02				
32.00	674.45	21.08				
33.00	697.13	21.13				
34.00	719.79	21.17				
35.00	742.39	21.21				
36.00	764.85	21.25				
37.00	787.06	21.27				
38.00	808.99	21.29				
39.00	830.58	21.30				

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851.78	21.29
872.55	21.28
892.76	21.26
912.39	21.22
931.45	21.17
949.83	21.11
967.48	21.03
984.38	20.94
1,000.54	20.84
	851.78 872.55 892.76 912.39 931.45 949.83 967.48 984.38 1,000.54

Results:

- 1. Average increment in volume per inch = 19.1 gallon.
- 2. The Total Liquid Capacity = 1000 gallon
- 3. Tank Volumes Calibrated In One-Inch Increments.
- 4. The following Charts.

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Charts



Conclusion

The volume of water was calculated from the point it reached one inch high in the tank, utilizing the SolidWorks program. Following this initial calculation, the water height was increased by one inch at each step, and the volume was recalculated until reaching the tank's maximum capacity. Subsequently, a correlation was established between the water level in the tank and its corresponding volume.

Additionally, the amount of volume increase per one-inch rise in water level was determined, allowing for the derivation of the average increase in tank water volume for each inch rise in water level. Furthermore, another correlation was drawn between the increment per inch in tank water height and the volume of water within the tank.

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BYAI/OE	DATE 4/22/24
THE CONSULTING	BUREAU INC.

Prepared by: ALI IBRAHIM

Reviewed by: OMAR ELSHAHAT



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April 22, 2024

To: Valencia pipe company 28305 Livingston Ave Valencia, CA 91355 United States



Subject: Documentation of The Total Liquid Capacity And Tank Volumes Calibrated In One-Inch Increments, (for septic tank, size 1500gallon)

Description:

- A gradation of standards will be created for each inch linking the level of the water surface inside the tank and the volume of water inside it.
- The volume of water inside the tank was calculated using SolidWorks when the water level was only one inch.
- The previous step was repeated for each two-inch water level and the water volume was calculated again and so on until we obtained a set of values for water heights and volumes.
- In the table there is a third column of values that contains the amount of increase in the volume of water at this height compared to the previous height.
- After that, a curve was drawn between the height of the water in the tank and the volume of water inside it to further clarify the table data.
- Another curve was drawn between the height of the water in the tank and the amount of volume increase in this step over the previous step in the gradual process.

Data:

Height: 64.9 inch

Width: 55 inch

Length: 135.57 inch

Thickness: 0.315 inch

Goals:

Obtain a scale between the water level in the tank and the volume of water inside it (calibrated in one-inch increment)





Here is the table containing the columns:

- \checkmark The first contains the water rising inside the tank by an increment of one inch
- \checkmark The second contains the volume of the tank at the corresponding height in the previous column
- \checkmark The third contains the amount of increase at this height over the previous heigh

Water level with one inch increment	Liquid Volume inside the tank (gallon)	Volume Increment per inch increment in water level
1	8.77	8.77
2	22.68	11.34
3	38.84	12.95
4	63.36	15.84
5	89.04	17.81
6	115.33	19.22
7	142.20	20.31
8	169.22	21.15
9	196.41	21.82
10	223.73	22.37
11	251.16	22.83
12	278.70	23.22
13	306.33	23.56
14	334.06	23.86
15	361.87	24.12
16	389.76	24.36
17	417.71	24.57
18	445.74	24.76
19	473.83	24.94
20	501.97	25.10

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21	530.17	25.25
22	558.40	25.38
23	586.71	25.51
24	615.05	25.63
25	643.42	25.74
26	671.82	25.84
27	700.23	25.93
28	728.63	26.02
29	757.00	26.10
30	785.41	26.18
31	813.86	26.25
32	842.55	26.33
33	871.20	26.40
34	899.67	26.46
35	928.07	26.52
36	956.44	26.57
37	984.83	26.62
38	1,013.29	26.67
39	1,041.65	26.71
40	1,069.97	26.75
41	1,098.17	26.78
42	1,126.23	26.81
43	1,154.06	26.84
44	1,181.59	26.85
45	1,208.86	26.86
46	1,235.75	26.86
47	1,262.13	26.85
48	1,288.12	26.84
49	1,313.54	26.81
50	1,338.19	26.76
51	1,362.20	26.71
52	1,385.50	26.64
53	1,408.00	26.57
54	1,429.56	26.47
55	1,450.16	26.37
56	1,469.86	26.25
57	1,488.47	26.11
58	1,505.77	25.96

Results:

- 1. Average increment in volume per inch = 24.4 gallon.
- 2. The Total Liquid Capacity = 1500 gallon
- 3. Tank Volumes Calibrated In One-Inch Increments.
- 4. The following Charts.





Conclusion

The volume of water was calculated from the point it reached one inch high in the tank, utilizing the SolidWorks program. Following this initial calculation, the water height was increased by one inch at each step, and the volume was recalculated until reaching the tank's maximum capacity. Subsequently, a correlation was established between the water level in the tank and its corresponding volume.

Additionally, the amount of volume increase per one-inch rise in water level was determined, allowing for the derivation of the average increase in tank water volume for each inch rise in water level. Furthermore, another correlation was drawn between the increment per inch in tank water height and the volume of water within the tank.

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THE CONSULTING	BUREAU INC.

Prepared by: ALI IBRAHIM

Reviewed by: OMAR ELSHAHAT



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THE CONSULTING BUREAU INC

30 Wall Street, 8th FL Office 813 New York, NY10005

Tell: 605-690-9946

Ali@consultingbureau.org

Engineerfny@gmail.com

April 23, 2024

To: Valencia pipe company 28305 Livingston Ave Valencia, CA 91355 United States

Subject: Documentation of tank buoyancy calculations and additional weights needed (for septic tank, 1000 gallon)

Description:

- > The forces acting up and down on the tank will be determined.
- > The upward force is the buoyant force and is equal to the weight of the fluid displaced.
- The downward forces are the weight of the tank and the water inside it, in addition to the weight of the soil on top of the tank.
- It will be considered that the upward force has a positive sign and the downward force has a negative sign, and then the resultant of the forces is found.
- If the resultant force is positive, the body tends to move upward. Therefore, an additional mass must be placed from above to equalize the weight and prevent buoyancy.
- If the resultant force is negative, then the resultant force is greater in the downward direction, so we do not need additional weights because there is no buoyancy.

Data:

- ✓ Height: 58 inch
- ✓ Width: 60 inch
- ✓ Length: 100.64 inch
- ✓ Thickness: 0.315 inch
- ✓ Soil is clay
- ✓ Soil specific density 90 ft^3
- ✓ Water density = 62.4 ft^3

Goals:

The goal is to create a table that includes a relationship between the water inside the tank, the height of the soil above the tank, and the weight necessary to equalize the weight and prevent the tank from floating

	Valencia	Valencia pipe company 1000 gallon septic tank additional weight necessary (lbs)							
Soil		" ground rise above base of tank (inch)							
cover (inch)	6	12	18	24	30	36	42		
6	5761	4673	3555	2422	1284	148			
9	4788	3700	2582	1449	311				
12	3815	2727	1609	476					
15	2843	1755	637						
18	1870	782							
21	897								
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Results:

- 1. Find the necessary weights to prevent the tank from floating
- 2. It has been observed that in many cases there is no need to put weights, as the tank does not float at all.
- 3. Cases in which the tank does not float without placing weights are usually in the case of the presence of water at a great height inside the tank

Buoyancy control methods:

Buoyancy control methods are vital for preventing uplift of structures like septic tanks in buoyant soil conditions. There are several effective strategies to mitigate buoyancy forces and ensure stability:

- 1. Anchoring Systems: Installing anchors made of concrete or steel securely attach to the septic tank and buried deep into the soil. These anchors increase the system's weight and stability, countering uplift forces.
- 2. Ballast Weights: Placing ballast weights, typically made of concrete or metal, on or around the septic tank can counteract upward forces exerted by buoyant soil or groundwater. Properly positioned ballast weights significantly enhance system stability.
- 3. Increased Tank Weight: Designing septic tanks with denser materials or additional reinforcement can help resist buoyancy forces. This approach reduces the need for external anchoring or ballasting.
- 4. Deep Burial: Installing septic tanks at greater depths places them below fluctuating groundwater levels, minimizing uplift potential. However, deep burial may require additional excavation and construction considerations.
- 5. Engineering Solutions: Advanced techniques like soil stabilization or ground improvement

methods can mitigate buoyancy. These solutions include soil compaction, grouting, or using geosynthetic materials to enhance soil strength.

6. Regulatory Compliance and Standards: Adhering to regulations and industry standards ensures effective buoyancy control. Compliance with guidelines and practices promotes responsible wastewater management and reduces risks associated with buoyancy.

By combining these methods and following regulations, stakeholders can mitigate buoyancy risks and ensure the stability and functionality of septic systems in buoyant soil environments. Proactive planning, proper design, and regular maintenance are crucial for long-term stability.

Conclusion

In conclusion, the issue of septic tank buoyancy is a critical consideration in the design, installation, and maintenance of septic systems. Buoyancy occurs when groundwater levels rise, exerting upward pressure on the tank, potentially causing it to float. This phenomenon poses significant risks, including structural damage, system failure, and environmental hazards.

To mitigate buoyancy risks, various strategies can be employed, such as proper tank anchoring, installation of ballast weights, or designing tanks with sufficient weight and depth to resist uplift forces. Regular inspection and maintenance are also essential to detect and address any buoyancy-related issues promptly.

SHOP DRAWING	/ SUBMITTAL REVIEW
APPROVED	APPROVED WITH CHANGES NOTED REJECTED:
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BYAI/OE	DATE 4/23/24
THE CONSULTING	BUREAU INC.

PREPARED BY: ALI IBRAHIM REVIEWED BY: OMAR ELSHAHAT

THE CONSULTING BUREAU INC

30 Wall Street, 8th FL Office 813 New York, NY10005

Tell: 605-690-9946

Ali@consultingbureau.org

Engineerfny@gmail.com

April 20, 2024

To: Valencia pipe company 28305 Livingston Ave Valencia, CA 91355 United States

Subject: Documentation of tank buoyancy calculations and additional weights needed (for septic tank 1500 gallon)

Description:

- > The forces acting up and down on the tank will be determined.
- > The upward force is the buoyant force and is equal to the weight of the fluid displaced.
- The downward forces are the weight of the tank and the water inside it, in addition to the weight of the soil on top of the tank.
- It will be considered that the upward force has a positive sign and the downward force has a negative sign, and then the resultant of the forces is found.
- ➢ If the resultant force is positive, the body tends to move upward. Therefore, an additional mass must be placed from above to equalize the weight and prevent buoyancy.
- If the resultant force is negative, then the resultant force is greater in the downward direction, so we do not need additional weights because there is no buoyancy.

Data:

- ✓ Height: 64.04 inch
- ✓ Width: 55 inch
- ✓ Length: 135.60 inch
- ✓ Thickness: 0.315 inch
- ✓ Soil is clay
- ✓ Soil specific density 90 ft³
- ✓ Water density =62.4 ft^3

Goals:

The goal is to create a table that includes a relationship between the water inside the tank, the height of the soil above the tank, and the weight necessary to equalize the weight and prevent the tank from floating

	Valencia pipe company 1000 gallon septic tank additional weight neces (lbs)						ght necessary
Soil			" ground ri	ise above ba	se of tank (inch)	
cover	6	12	18	24	30	36	42
(inch)							
6	7109	5747	4353	2941	1520		
9	5177	3815	2421	1009			
12	3245	1883	489				
15	1313						
18							
21							
24							
27							
30							

Results:

- 1. Find the necessary weights to prevent the tank from floating
- 2. It has been observed that in many cases there is no need to put weights, as the tank does not float at all.
- 3. Cases in which the tank does not float without placing weights are usually in the case of the presence of water at a great height inside the tank

Buoyancy control methods

Buoyancy control methods are vital for preventing uplift of structures like septic tanks in buoyant soil conditions. There are several effective strategies to mitigate buoyancy forces and ensure stability:

- 1. Anchoring Systems: Installing anchors made of concrete or steel securely attach to the septic tank and buried deep into the soil. These anchors increase the system's weight and stability, countering uplift forces.
- 2. Ballast Weights: Placing ballast weights, typically made of concrete or metal, on or around the septic tank can counteract upward forces exerted by buoyant soil or groundwater. Properly positioned ballast weights significantly enhance system stability.
- 3. Increased Tank Weight: Designing septic tanks with denser materials or additional reinforcement can help resist buoyancy forces. This approach reduces the need for external anchoring or ballasting.
- 4. Deep Burial: Installing septic tanks at greater depths places them below fluctuating groundwater levels, minimizing uplift potential. However, deep burial may require additional excavation and construction considerations.

- 5. Engineering Solutions: Advanced techniques like soil stabilization or ground improvement methods can mitigate buoyancy. These solutions include soil compaction, grouting, or using geosynthetic materials to enhance soil strength.
- 6. Regulatory Compliance and Standards: Adhering to regulations and industry standards ensures effective buoyancy control. Compliance with guidelines and practices promotes responsible wastewater management and reduces risks associated with buoyancy.

By combining these methods and following regulations, stakeholders can mitigate buoyancy risks and ensure the stability and functionality of septic systems in buoyant soil environments. Proactive planning, proper design, and regular maintenance are crucial for long-term stability.

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SHOP DRAWING	SUBMITTAL REVIEW
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SUBMITTAL WAS REVIEWED FO CONFORMANCE TO CONTRACT IS RESPONSIBLE FOR CONFIR AT JOB SITES FOR TOLER/ FABRICATION PROCESSES AT COORDINATION OF HIS WOI COMPLIANCE WITH THE CONTR	DR DESIGN CONFORMITY AND GENERAL FDOCUMENTS ONLY. THE CONTRACTOR MING AND CORRELATING DIMENSIONS ANCES, CLEARANCES, QUANTITIES, NO TECHNIQUES OF CONSTRUCTION, RK WITH OTHER TRADES AND FULL MACTDOCUMENTS.
BYAI/OE	DATE 4/23/24
THE CONSULTING	BUREAU INC.

PREPARED BY: ALI IBRAHIM REVIEWED BY: OMAR ELSHAHAT

Best Practices Septic Tank Installation

Model # 87-41320 500 gallon, Single Compartment

Model # 87-41720 1000 gallon, 2 Compartment Model # 87-41718 1000 gallon, 1 Compartment

Model # 87-41760 1500gallon, 2 Compartment Model # 87-41758 1500 gallon, 1 compartment

GENERAL INFORMATION

- Always check local codes for approvals prior to purchase, delivery, and installation.
 - Select a proper site on your property taking into account slope, soil type, drainage, and possible effects on neighboring property.
 - Apply for permits.
- You'll see "flowable" material mentioned in this overview. What does it mean? Different soils have different capabilities to move water. Clay soils tend to hold water (not good in a septic tank installation) where sandy soils dissipate water quickly. Here's an overview to assist your decision-making process:

Soil Type	Texture	Water Flow (cm/hour)
Sand	Coarse	5.0
Sandy Loam	Coarse	2.5
Loam	Moderately Coarse	1.3
Clay Loam	Moderately Fine	.8
Silty Clay	Fine	.25
Clay	Fine	.05

• Ensure you select a tank properly sized for the number of people and bedrooms in your home. The best way to gauge how big of a septic tank you need is to add up the number of bedrooms and bathrooms on your property. Here's an approximate overview to help you determine the size tank you'll need:

# Bedrooms	Minimum Capacity (Gallons)
0 (Small apartments, lofts)	750
1, 2, or 3	1000
4	1250
5	1500
6	1750

- A septic tank is not the same as an underground water tank (sometimes called a cistern tank). A septic tank must be kept full at all times. It is for septic systems only; not for fresh water storage.
 - Cistern tanks (white) use the same mold but utilize more resin material, making thicker walls. It can be buried in the same manner as a septic tank but can be pumped to ¹/₄ full.
 - It is ideal for fresh water underground storage.
 - Septic tanks and cistern tanks are <u>not</u> for above ground use.

- Check local codes for the type of pipe and installation protocols for your area.
 - You may have to use a certain size/type of rock (or sand) to install the feeder line from the home/building to the septic tank itself. Know and adhere to these codes.
 - Mark out the chosen tank location allowing an extra 18"-24" around each side of the tank.
 - This is best done using high-visibility spray paint.
- Call 811 before you dig. It is important to know the location(s) of various utility pipes, conduit, and cables.

BUOYANCY CONTROL

What is "Buoyancy Control?"

- If you have a high water table in your area, upward force can be applied to a buried septic tank no matter if it is concrete, fiberglass reinforced plastic, or rotomolded plastic.
- This upward pressure can actually push a tank out of the ground and severely damage your entire septic system.
- *Generally* (not always!) speaking . . .
 - Tanks buried with at least 12" of properly compacted top-fill do not require a restraint if the water table will not exceed 36" of the height of the tank.
 - If your water table is high and will impact the tank AND there is less than 12" of properly compacted top-fill, you may most likely require a restraint system.
 - Different types of restraint system are:
 - Blocks & Straps
 - Restraining Collar
 - Helical Anchors

What you can (and should) do:

- 1. Have a site survey done by a qualified geologist and do a percolation (soil) test on the area where the system is going to be installed.
 - a. This includes not only the area where the tank will be placed but also the leaching area. Then the system can be designed based on the findings of the survey and results of the soil test.
- 2. Apply for the appropriate permits and approvals.
- 3. Order all appropriate required restraint supplies prior to the installation of the tank and/or call a professional septic tank installation company to do the job.
- 4. NOTE: Some states, counties, and/or municipalities prohibit uncertified people from installing septic tanks and will most likely require its removal even if properly done.

EXCAVATION

- Excavate the tank area, allowing for 6"-12" of bedding and a minimum of 6" to a maximum of 30" top fill depending on local codes.
 - Allow for use of a manhole riser in the overall depth of the excavation (if you're going to use it).
 - Remove any roots.
 - Rake the bottom of the tank area and place a minimum of 6" of properly compacted sand in the bottom of the tank excavation. 12" for rocky soil.
 - Native material can be used instead of sand so long as it is flowable, compactable and rock free.
 - Make sure the bottom is level before placing the tank.

PLACEMENT OF TANK

- Rig the tank for placement into the excavation and lower it into place.
- Ensure the inlet hole on the end of the tank is facing the home or building.
 - The inlet hole is higher than the outlet hole on the other side of the tank to ensure adequate effluent flow. Both are marked on the top area of the tank.
- Wiggle the tank around when placed into the excavation so it sits uniformly on the bottom with no gaps in the bottom support ribs.
- Make sure it is level. Use a level across the manhole covers to determine it is level on all sides.
- Fill the tank with 12" water and place compactable back-fill around the sides of the tank (starting with the ends) in 12" layers.
- Fill in and aggressively tamp down all ribs with compactible, rock free, and flowable native soil or sand.
- Add 12" more water and the next 12" layer of backfill (starting at the ends of the tank). Be sure the ribs of the tank are filled and compacted as you go.
- Repeat this process until you reach the bottom of the outlet hole of the tank.

INSTALL THE SANITARY TEES

- Install the 4" gasket (provided) into the tank's outlet and inlet openings. Some people prefer to do this before lowering the tank into place.
 - Once installed on the wall(s) of the tank, lightly grease the gasket surface to facilitate sliding the outlet and inlet pipes into the gasket.
 - Slide the end of the outlet pipe from the building into the gasket until the end of the pipe is underneath the manhole opening.
 - $\circ~$ Repeat this process on the inlet side of the tank.

• Secure the sanitary tee on to the end of the drainpipe in the manhole cover area using pvc primer and cement.

The included bushing is required for SDR-35 pipe. Be sure to prime and cement the bushing in place before installation of the inlet and outlet pipes.

Tip: To ensure a good, tight fit when gluing the tee to the pipe, be sure to use primer and an adequate amount of pvc cement. Place the tee on the pipe in a *horizontal* position, then immediately rotate it 90° to a *vertical* position (long end down). This will ensure good distribution of the solvent cement and a very tight connection!

- Using an outlet effluent filter?
 - Install it into the <u>outlet</u> sanitary tee at this time.
 - Make sure it is accessible from the manhole cover or riser.

Tip: Contact your local inspector before moving to the burial process.

FINAL STEPS

- If using a manhole extension (riser), prepare and install it at this time in accordance with manufacturer's guidelines.
- If using a 2 compartment (2 manhole openings) septic tank, install the 20" covers using tamper resistant screws if the lid/opening will be above grade.
- Leak testing:
 - Most codes require that a water test is to be performed by installing the tank, connecting inlet and outlet piping (with caps), installing risers as necessary, and filling with water two inches above the tank into the riser for 24 hours. The tank penetrations must be visible. The water level is to be marked in the riser. The tank is to be refilled to the mark and observed for one hour. If the level has not dropped the tank passes.
 - Pneumatic (air) testing is also allowed and requires special equipment. Consult with an approved septic tank installation if you elect to use this method.
 - Always consult your local codes for specific test requirements for your area.
- After a successful leak test, continue to bury the tank in 12" increments using the remaining clean back-fill. Ends first, then sides. Firmly compact the back-fill as you go.
 - Ensure there is a slight mound over the tank so water flows away from the tank.
- Install the leach field in accordance with instructions and recommendations from the supplier(s) of the leach field parts as well as your local codes.

SEPTIC TANK PARTS & ACCESSORIES							
Model #	Description	Imaga		Model #	Description	Imago	
89-TB4	4" Sanitary Tee with SDR 35 Bushing. Also acts as a filter housing (for 89-EF4)	ary Tee with 5 Bushing. ets as a filter g (for 89-EF4)		89-EF4	4" Effluent Filter	Image	
89- EF4COMBO	4" Baffle Sanitary Tee, Filter, SDR 35 bushing.	111		89-SPL4G	4" Inlet/Outlet Gasket for 4" Tee	0	
89-B4035	Sch 40 to SDR-35 Bushing			89-SD4	4" Outlet Tee Solids Deflector	A	
89-20RTT	20" Riser to Tank Adapter	0		89-20RISP	20" Riser 3" Green (safety pan)	0	
89-20RIS12	20" x 12" Manhole Extension (riser)			89-RISLGrn	20" Domed Lid		
89-20RIS6	20" x 6" Manhole Extension (riser)			89-BUTYL	3/8" x 20' Butyl Sealant Rope		

Typical Riser Assembly:

IAPMO RESEARCH AND TESTING, INC.

5001 E. Philadelphia Street, Ontario, CA 91761 • Phone (909) 472-4100 • Fax (909) 472-4244 • www.iapmort.org

CERTIFICATE OF LISTING

IAPMO Research and Testing, Inc. is a product certification body in which its product certification system includes inspection and testing of samples taken from the supplier's stock or from the market or a combination of both to verify compliance to the requirements of applicable codes and standards. This activity is coupled with periodic surveillance of the supplier's factory and/or warehouses as well as the assessment of the supplier's Quality Assurance System. This listing is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO Research and Testing, Inc. of the product acceptance by Authorities Having Jurisdiction.

Issued To:

VALENCIA PIPE COMPANY

28305 LIVINGSTON AVE VALENCIA, CA 91355, United States

Product: Prefabricated Septic Tanks

Products are in compliance with the following code(s): Uniform Plumbing Code (UPC®) National Plumbing Code of Canada Products are certified to the following standard(s) IAPMO/ANSI Z1000-2019 and CSA B66-2021

File Number: 16181

Effective Date: April 2024

Chairman, Product Certification Committee

Void After:

April 2029*

Chief Technical Service Officer

*This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

This listing period is based upon the last date of the month indicated on the Effective Date and Void After Date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of the Product Certification Committee, or any evidence of non-compliance with applicable codes and standards or of inferior workmanship, may be deemed sufficient cause for revocation of this listing. Production of or reference to this form for advertising purposes may be made only by specific written permission of IAPMO Research and Testing, Inc. Any alteration of this certificate could be grounds for revocation of the listing. This document shall be reproduced in its entirety.

IAPMO RESEARCH AND TESTING, INC. CERTIFICATE OF LISTING

Issued To: VALENCIA PIPE COMPANY

File Number: 16181

Product: Prefabricated Septic Tanks

Effective Date: April 2024

Void After: April 2029

This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

Identification:

Each tank shall be marked with the following information: 1) manufacturer's name or trademark; 2) model number; 3) working liquid volume in gallons and liters; 4) date (i.e., month and year), date code, or identifier traceable to the date of manufacture; 5) maximum design load and maximum burial depth for which the tank is designed in feet and meters; 6) volume of the chamber(s) as a function of depth in gallons per inch and liters per centimeter (this can be affixed to the tank exterior or provided in the manufacturer's product literature); 7) inlet and outlet; 8) type of tank (e.g., H, T, S, P, ES or EP); and 7) statement "above-ground installation not permitted" or "AGINP" (where applicable). For a concrete tank, a marking shall indicate whether it is suitable for sulphate or non-sulphate soils, i.e. "SUL" or "NON-SUL". Markings shall be permanent, legible, and visible. Acceptable means of applying permanent markings shall include permanently affixed metal plates, etching, mechanical stamping, stamping with a permanent (non-water-soluble) ink, and molding in. Markings shall be located on the top of the tank near the access opening or at the end of the tank near the inlet. The product shall also bear the cUPC® certification mark adjacent to product markings.

Characteristics:

Prefabricated septic tanks made of concrete, fiber-reinforced polyester (FRP), thermoplastic, or steel. To be installed in accordance with the manufacturer's instructions and the latest edition of the Uniform Plumbing Code.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

IAPMO RESEARCH AND TESTING, INC. CERTIFICATE OF LISTING

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Models

Model Number	Description
87-41718	1000 Gallon Single Compartment Septic Tank Yellow
87-41720	1000 Gallon Two Compartment Septic Tank Yellow
87-41758	1500 Gallon Single Compartment Septic Tank Yellow
87-41760	1500 Gallon Two Compartment Septic Tank Yellow

	Baffle placement: 65" from side wall to baffle on 2/3 (inlet) side; 35" from side wall to baffle on 1/3 (outlet side).						
UNLESS O	UNLESS OTHERWISE SPECIFIED: FINISH:		DEBURR AND	DO NOT SCALE DRAW	VING REVISION		
DIMENSIO	NS ARE IN INCHES			BREAK SHARP			
SURFACE I	FINISH:			EDGES			
TOLERANO	CES:						
LINEAR:							
ANGULA	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN			12/11/2023				
CHKD	D. Simon		March 2024	1000 GA	ALLON TWO COMPARTM	ENT SEPTIC TANK	
APPV'D					INTERNAL BAFF	LE	
MFG							
QA				MATERIAL: High	Density Polyethylene (HDPE)		
				WEIGHT: 17 lbs	SCALE:	SHEET: 1 OF	

Valencia Pipe Company 1500g Septic Baffle Part # 85-ST-1500-BL

		Baffle placement: 65" fro	om side wall to b	affle on 2/3 (inlet) side; 35" fro	om side wall to baffle on 1/3 (outlet side).	
UNLESS C	UNLESS OTHERWISE SPECIFIED: FINISH:		DEBURR AND	DO NOT SCALE DRAWI	NG REVISION	
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP		
SURFACE	FINISH:			EDGES		
TOLERAN	ICES:					
LINEAR	2:					
ANGUL	AR:					
	NAME	SIGNATURE	DATE	TITLE:		
DRAWN			12/11/2023			
CHKD	D. Simon		March 2024	1500 GA	ALLON TWO COMPARTME	NT SEPTIC TANK
APPV'D					INTERNAL BAFFL	E
MFG						
QA				MATERIAL: High	Density Polyethylene (HDPE)	
				WEIGHT: 19 lbs	SCALE:	SHEET: 1 OF 1

Valencia Pipe Company Vertical Water Storage Tank Placement of UL-969 Tank Labels

For model #s

85-40703 – 550g Black	85-40864 – 550g Dark Green
85-40631 – 2500g Black	85-40867 – 2500g Dark Green
85-40635 – 3000g Black	85-40868 - 3000g Dark Green

A WARNING

EXCESSIVE WEIGHT OF HEAVY SHUT-OFF VALVES OR HEAVY HOSES MUST NOT BE CARRIED BY THE FITTINGS. RIGID PIPING MUST NOT BE CONNECTED DIRECTLY TO TANK, FLEXIBLE CONNECTIONS ARE REQUIRED.

CHECK COMPATIBILITY OF GASKET MATERIAL WITH PRODUCT TO BE STORED.

Per ANZI 1002

13.2 Access Markings

Accesses of rainwater harvesting tanks (a) not suitable for human entry shall be marked "DO NOT ENTER" Valencia Pipe Company Septic Tank Placement of UL-969 Tank Labels

For model #s

Valencia Pipe Company Cistern Tank Placement of UL-969 Tank Labels

For model #s

88-41238 – 600g White

88-41329 - 1200g White

88-41330 - 1700g White

3:

"OUTLET" molded into tank viewable from above. 2:

"INLET" molded into tank viewable from above.

Per ANZI 1002

13.2 Access Markings

Accesses of rainwater harvesting tanks (a) not suitable for human entry shall be marked "DO NOT ENTER"

Embossed into lid:

"WARNING DANGER! DO NOT ENTER TANK HAZARDOUS GASES MAY EXIST IN TANK. KEEP LID TIGHT AND SECURE AT ALL TIMES. To avoid puncture keep sharp objects away from tank. Yellow and black tanks are not for potable water."

Valencia Pipe Company 20" Domed Septic Tank Lid Assembly Model # SPL-001-L

Item #	Mfgr Part #	Description	Qty
1	SPL-001	Black lid	1

UNLESS C	OTHERWISE SPECIFIED:	FINISH:		DEBURR AND	DC	ONOT SCALE DRAWING	REVISION
DIMENSIO	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	VCES:						
LINEAR	R:						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN							
CHKD							
APPV'D							
MFG				MATERIAL: H	ligh Density Pol	lyethylene (HDPE)	
QA				WEIGHT: 2 lbs.		SCALE:	SHEET: 1 OF 1

Valencia Pipe Company 20" Greem Domed Septic Tank Lid Model # 89-RISL-GRN

Item #	Mfgr Part #	Description	Qty
1	89-RISL-GRN	Tuf Tite 20" Domed Lid	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO	NOT SCALE DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR	•						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL: Copoly	mer Polypi	ropylene	
QA				WEIGHT: 3.5 lbs.		SCALE:	SHEET: 1 OF 1

Item #	Mfgr Part #	Description	Qty
1	SPL-ER-004	4" white ABS ANSI/NSF baffle tee	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT	SCALE DRAWING	REVISION
DIMENSIO	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR							
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 1 lb 3 oz	SCAI	LE:	SHEET: 1 OF 1

1

Color:	W	hite	

Item #

Mfgr Part #

Description

4

Qty

						0		<u>,</u>	
					1	89-EF4	4" white AB	S ANSI/NSF baffle tee	1
					2	89-B4035	Sch 40 to	o SDR-35 Bushing	1
					3	SPL-ER-G	4" bla	ck rubber gasket	1
					4	89-EF4	4" Yelle	ow Effluent Filter	1
					5	89-SD4	4" White PVC	C Solid Waste Deflector	1
UNLESS OTHE	ERWISE SPECIFIED:	FINISH:		DEBURR AND	DO	NOT SCALE D	RAWING	REVISION	
DIMENSIONS	ARE IN INCHES			BREAK SHARP					
SURFACE FIN	ISH:			EDGES					
TOLERANCES	5:								
LINEAR:									
ANGULAR:									
	NAME	SIGNATURE	DATE	TITLE:					
DRAWN	Tuf-Tite								
CHKD	D. Simon		April 2024						
APPV'D									
MFG				MATERIAL:					
QA				WEIGHT: 4.04 lbs		SCALE:		SHEET: 1 OF 1	

Valencia Pipe Company 4" Baffle Tee Gasket Model # SPL-ER-G

Item #	Mfgr Part #	Description	Qty
1	SPL-ER-G	4" black rubber gasket, ASTM C-564 and ASTM C-1563	1

UNLESS C	OTHERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT	SCALE DRAWING	REVISION
DIMENSIO	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR	2:						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN							
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 7.5 oz.	SCA	LE:	SHEET: 1 OF 1

Material: High-Impact Polypropylene Color: Yellow

Item #	Mfgr Part #	Description	Qty
1	89-EF4	4" Yellow Effluent Filter	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT SCALE DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP		
SURFACE	FINISH:			EDGES		
TOLERAN	CES:					
LINEAR						
ANGUL	AR:					
	NAME	SIGNATURE	DATE	TITLE:		
DRAWN	Tuf-Tite					
CHKD	D. Simon		April 2024			
APPV'D						
MFG				MATERIAL:		
QA				WEIGHT: 15 oz.	SCALE:	SHEET: 1 OF 1

Valencia Pipe Company Schedule 4 to SDR-35 Bushing Model # 89-B4035

Item #	Mfgr Part #	Description	Qty
1	89-B4035	Sch 40 to SDR-35 Bushing	1

UNLESS O	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT SCALE DRAWIN	IG RE	VISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	CES:						
LINEAR							
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 2 oz.	SCALE:	S	SHEET: 1 OF 1

Valencia Pipe Company 4" Solid Waste Deflector Model # 89-SD4

Item #	Mfgr Part #	Description	Qty
1	89-SD4	4" White PVC Solid Waste Deflector	1

UNLESS O	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT SCALE DRAWING	ĩ	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	CES:						
LINEAR	:						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 3.1 oz.	SCALE:		SHEET: 1 OF 1

Valencia Pipe Company 20" Tank to Riser Adapter - Green Model # 89-20RTT

Item #	Mfgr Part #	Description	Qty
1	89-20RTT	20" Tank to Riser Adapter - Green	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT SCALE	E DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	CES:						
LINEAR							
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 1 lb, 3 oz	SCALE:		SHEET: 1 OF 1

Valencia Pipe Company 3" x 20" Riser / Safety Pan - Green Model 89-20RISP

Item #	Mfgr Part #	Description	Qty
1	89-20RISP	3" x 20" diameter green riser / safety pan	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NOT	SCALE DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR	•						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 2.65 lbs.	SCAL	LE:	SHEET: 1 OF 1

Item #	Mfgr Part #	Description	Qty
1	89-20RIS6	6" x 20" diameter green riser	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DC	NOT SCALE DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR							
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 3 lbs, 5 oz		SCALE:	SHEET: 1 OF 1

Valencia Pipe Company 12" x 20" Riser Green Model # 89-20RIS12

Item #	Mfgr Part #	Description	Qty
1	89-20RIS12	12" x 20" diameter green riser	1

UNLESS C	THERWISE SPECIFIED:	FINISH:		DEBURR AND	DO NO	T SCALE DRAWING	REVISION
DIMENSIC	ONS ARE IN INCHES			BREAK SHARP			
SURFACE	FINISH:			EDGES			
TOLERAN	ICES:						
LINEAR	•						
ANGUL	AR:						
	NAME	SIGNATURE	DATE	TITLE:			
DRAWN	Tuf-Tite						
CHKD	D. Simon		April 2024				
APPV'D							
MFG				MATERIAL:			
QA				WEIGHT: 5 lbs 14 oz	SCA	ALE:	SHEET: 1 OF 1

<u>Underground Septic Tank</u> Installation Instructions

www.valenciapipe.com (661) 257-3923 info@valenciapipe.com

Septic Tanks are for UNDERGROUND use only. Failure to comply will void all warranties.

Always be sure to check your local codes relative to underground tank installations. Some states, counties, and/or municipalities have very strict codes, especially regarding septic tanks. Septic tanks may not be returned due to inspector rejections after installation.

VPC Underground Septic Tanks

1500g Septic Tank (1 or 2 compartments)

1000g Septic Tank (1 or 2 compartments)

Site Preparation & Tank Placement

- 1. Dig a hole that will provide a minimum of 6" and a maximum of 30" of cover over the top of the tank.
 - Allow 18" to 24" on both sides and both ends of the tank.
 - Possible tank collapse could occur if these allowances are not provided and may void the warranty.
- 2. Bedding material:
 - Well packed sand is the preferred bedding material.
 - 6" for regular soil terrain and 12" for rocky terrain.
 - Native soil is acceptable so long as it is flowable, compactable, rock free, and can provide uniform overall support, especially in the recessed rib areas.
 - Ensure all backfill material is free of wood, masonry debris, silt, and/or clay.
 - When bedding material is in place and the foundation for the tank is level, carefully lower the tank into place. • This is best done with 2-3 people depending on the size and weight of the empty tank.
 - Wiggle the tank around to seat it into the sand or pea gravel to and to allow the foundation bedding material to fully support the tank and bottom ribs.
- 3. Install supplied 4" tees and gaskets in the inlet and outlet holes in the tank prior to placing it in a properly sized excavated hole (see below).
 - The tees can be used with 4" schedule 40 pipe or 4" SDR 35 pipe.
 - \circ Note the direction of the flow and that the inlet hole is higher than the outlet hole.
 - Use standard PVC cement to create a solvent weld to incoming lines and outbound leach field after the tank is lowered into the hole.
 - Note: If using ABS pipe, ensure the proper ABS-PVC cement is used. ABS-ABS or PVC-PVC cement will not suffice.

NOTE: High water tables can cause a septic tank to float to the surface. If your state, county, or city requires tank buoyancy mitigation, please refer to the Septic Tank Buoyancy Mitigation Recommendations included with these instructions and/or call professional qualified septic tank installer.

4. Optional: Install a manhole extension(s) if desired.

- Manhole extensions can be ordered along with your septic tank(s). 0 12", 6", and 3" high x 20" diameter.
 - Tank adapter ring is suggested for placement between the tank and the risers.

- Maximum burial level of our septic tanks is 30", so manhole extensions may be stacked on each other to obtain desired tank burial depth.
 - Use butyl rope or silicone to create a watertight seal if stacking risers.
- Use the lid(s) supplied with the tank to place on top of the manhole extension and secure with provided stainless steel screws.

Backfilling

This is a very important phase of your installation. Please follow instructions carefully to ensure optimal tank performance.

- 5. Fill tank with 12" of water.
- 6. Backfill the excavation with 12" of clean backfill material.
 - IMPORTANT: Firmly compact the ends first, then the sides of the tank.
 - Upon completion of the first 12", continue this sequence all the way to the surface.
 - 12" of water in the tank; 12" of firmly compacted backfill around the tank.
 - Be sure to compact backfill under the inlet and outlet pipes.
- 7. As previously mentioned, 30" maximum burial level between the top of the tank and surface grade level.
- 8. Mound soil over the top of the tank to ensure positive drainage.

Important Additional Notes*

- ✓ Always check local codes to ensure plastic septic tanks can be used prior to purchasing or installation.
- ✓ Have a professional site survey done by a qualified, certified geologist prior to purchasing or installation.
- \checkmark Do not install any tank in a high-water table and/or in water saturated clay.
 - The tank may collapse and expel its contents.
- ✓ Don't store a plastic tank near a flame or heat in excess of 180°F.
- ✓ Protect the tank from sharp objects both in advance of installation and during installation.
- \checkmark Vehicles and/or heavy equipment can be detrimental to an underground tank.
 - Don't bury under the path of vehicles and/or heavy equipment.
- ✓ Septic tanks should be kept full at all times.
 - If a septic tank is pumped for normal maintenance, it should be refilled immediately.
- Septic tanks are not holding tanks and should not be used as such.
 - Septic tanks may not be used for drinking water.
- ✓ HDPE (high density polyethylene) tanks can be repaired. Generally, here is how it is done:
 - 1. Tank must be unearthed and emptied (not necessarily uninstalled and removed from its hole).
 - 3. Purchase some HDPE strips or material.
 - 5. Repeat the process until the hole is completely filled and is secure.
 - 7. If desired, use no heavier than 80 grit sandpaper to smooth the surface. Do not over-sand.
- 2. Once the leaking point has been located, ensure there are no jagged edges and that the hole is "cleaned up". This can be done with a standard handheld grinding tool and some soapy water.
- 4. Use a medium or large tipped soldering iron to melt the material around the hole as well as to melt the HDPE strips into the hole.
- 6. Test fill with water to above the hole to ensure it is watertight. If not, add more HDPE.
- 8. Re-bury and re-compact as per original instructions (12" of water in tank followed 12" of compacted back-fill (starting with the ends)) and repeat until completely buried.

* - Failure of any of the above will void warranty.

VPC Tanks Limited Warranty

When installed in accordance with manufacturer's instructions, VPC (Valencia Pipe Company) warrants against defective materials and/or workmanship for three (3) years from the date of manufacture. Date of manufacture (serial number) can be found on the permanent label affixed to each tank. Should a defect appear within the warranty period, Valencia Pipe Company will supply a like replacement tank. Cost of removal and/or installation and consequential damages are not covered.

CONSUMER SHOULD CONTACT VALENCIA PIPE COMPANY PRIOR TO REMOVAL OF THE ALLEDGED DEFECTIVE TANK TO RECEIVE THE REQUIRED WARRANTY FORM.

Valencia Pipe Company Tanks Septic Tank Buoyancy Mitigation Recommendations

	Valencia Pipe Company 1000 Gallon Septic Tank					
	Additional Weight Necessary (Pounds)					
Inches of Soil	Inches of Groundwater Above Base of Tank					
Cover On Top						
of Tank	6	12	18	24	30	
6		360	1890	3330	4860	
9			540	2070	3510	
12				720	2250	
15					900	
18						
21						
24						
27						
30						

Some Suggestions:

	Valencia Pipe Company 1500 Gallon Septic Tank					
	Additional Weight Necessary (Pounds)					
Inches of Soil	Inches of Groundwater Above Base of Tank					
Cover On Top						
of Tank	6	12	18	24	30	
6		540	2700	4770	6840	
9			810	2880	5040	
12				1080	3150	
15					1260	
18						
21						
24						
27						
30						

* - 90# used for caluclation purposes.

No additional weight or restraints necessary Amount of extra weight / restraint necessary (In pounds)

Concrete Block

Concrete Parking Lot Bumper

Installing an underground septic system is a labor- and time-intensive endeavor that requires some expertise.

If you are unsure of any aspect of your septic tank installation, hire or consult with a qualified tank installer.

Valencia Pipe Company 28305 Livingston Ave. Valencia, CA 91355

www.valenciapipe.com (661) 257-3923 (661) 257-3928 (fax)

IAPMO RESEARCH AND TESTING, INC.

5001 E. Philadelphia Street, Ontario, CA 91761 • Phone (909) 472-4100 • Fax (909) 472-4244 • www.iapmort.org

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Issued To:

VALENCIA PIPE COMPANY

28305 LIVINGSTON AVE VALENCIA, CA 91355, United States

Product: Prefabricated Septic Tanks

Products are in compliance with the following code(s): Uniform Plumbing Code (UPC®) National Plumbing Code of Canada

Products are certified to the following standard(s) IAPMO/ANSI Z1000-2019 and CSA B66-2021

File Number: 16181

Effective Date: April 2024

Void After:

im

Chairman, Product Certification Committee

April 2029*

Chief Technical Service Officer

*This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.lapmo.org

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Models

Model Number	Description
87-41718	1000 Gallon Single Compartment Septic Tank Yellow
87-41720	1000 Gallon Two Compartment Septic Tank Yellow
87-41758	1500 Gallon Single Compartment Septic Tank Yellow
87-41760	1500 Gallon Two Compartment Septic Tank Yellow

Yellow Septic Tanks

1. How are these tanks made?

They are made via a roto-mold process. Resin pellets are placed in a mold of the tank. It is then placed in an oven and the mold rotates in a manner to evenly disburse the resin over the complete surface of the mold. After a specified time period, it is pulled from the oven and allowed to cool. The tank is then removed from the mold and accessories are added manually.

2. What material is it made of?

UV stabilized BPA free HDPE (high density polyethylene) resin.

3. Do your septic tanks include 4" tees and gaskets?

Yes. 500g has 1 tee and gasket; 1000g and 1500g models have 2 tees and gaskets.

4. Can I use this tank above ground?

No. It is designed, tested, and approved for underground use only. Failure to do so would void the warranty.

5. Can I use this in my state?

One should always check local codes prior to purchase. Some jurisdictions prohibit in-ground plastic tanks. Others forbid septic tanks no matter the material. Septic tanks cannot be returned to the retailer or distributor after installation as they are considered a "biohazard" despite the fact that it may have not been filled.

6. Can this tank be used to store water?

No. The material it is made of is not for use with water. We suggest you look at a white cistern tank.

7. Can this be used as a holding tank?

No. It must be kept full at all times. A holding tank indicates that water would be removed from it. We suggest you look at a cistern tank which has a stronger infrastructure and can handle the pressure differentials.

8. Can this tank be pumped?

The tank can be pumped so long as instructions are followed carefully. As it should not be empty at any time, refill the tank completely as quickly as possible after pumping.

9. What is the maximum burial level of your septic tanks? 30"

10. What can I use between the septic tank and the surface grade?

Use a manhole extension. There are several choices available at your local Home Depot via our Quick Ship program. See your local store's Special Services Desk. These are 20" in diameter (to fit over the manhole of your septic tank) and may be stacked to attain a maximum 30" burial. The lid from the septic tank will fit on top of the manhole extension and would be easily accessible at the surface.

White Cistern Tanks

1. How is this tank different from a yellow septic tank?

- a. Septic tanks and cistern tanks are actually formed using the same mold.
- b. More resin is used in a cistern tank creating thicker walls providing more support against pressure differentials.
- c. Cistern tanks use an FDA-approved white resin that makes them safe for use with potable water. Septic tanks *should not* be used for water.

2. Does this tank need to be kept full at all times?

No. One may pump water out of it, but it should never be less than $\frac{1}{4}$ full.

3. Can this tank be used as a holding tank for water?

Yes. It is actually designed for that use.

Valencia Pipe Company 28305 Livingston Avenue Valencia, CA 91355

www.valenciapipe.com (661) 257-3923 Fax: (661) 257-3928

Valencia Pipe Company Tank Warranty

VPC (Valencia Pipe Company) tanks have a three (3) year limited warranty from the date of manufacture. Date of manufacturer can be determined by accessing the serial number on the tank, most often near the manhole opening.

Should a defect appear within the warranty period VPC will supply a new, equivalent tank in replacement thereof. Or, at its discretion, VPC will repair the alleged defect on site if feasible. VPC's liability is limited to the value of the tank itself and specifically excludes the cost of installation and/or removal or consequential damages.

Tank(s) installed in an incorrect fashion will not be eligible for warranty. (For instance, installing a vertical tank underground (fully or partially); not following specific installation instructions for septic tanks, etc.).

Contact Valencia Pipe Company to obtain a return request authorization. <u>DO NOT</u> remove any tank from its current installation and <u>DO NOT</u> take any tank(s) back to Home Depot prior to receiving the return authorization.

info@valenciapipe.com

(661) 257-3923 x 1026

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