



Double-wall Heating Oil Storage Tanks and Accessories

Product Catalog

Tanks
Installation Kits
Covers
Accessories



Living full of energy



Table of Contents

Roth Double-wall Oil Storage Tanks, UL Listed.....	1
Installation Kits.....	2
Tank Covers.....	2
Expansion Kits.....	3
Tie Down Kits.....	3
Oil Gauges.....	4
Leak Detectors.....	4
Base.....	4
Duplex Bushings.....	5
Vent Alarm.....	5
Fuel Oil De-Aerator.....	5
Die Cast Adapter.....	5
Cap Nut.....	6
#3 Gasket.....	6
Plastic Wrench.....	6
Bulkhead Nut.....	6
Waste Oil Filling Pan.....	6
Waste Oil Hand Pump.....	6

TANKS



The Roth Double Wall Safety Fuel Oil Storage Tank (DWT) is made with a seamless blow-molded polyethylene inner tank and a 19 ga. galvanized outer tank. The outer tank is formed by joining cold rolled sheet steel, used to form the sides and bottom from a single piece, with two stamped metal end pieces. The edges between the sides and ends have sealant applied to them and are then rolled to create leak-proof seams. A stamped top is then pressed and riveted into place to complete the assembly of the DWT. The DWT is UL® listed in the United States and Canada under SU2258 and approved under NFPA 31 (2001) and CSA B-139-04 as non-metallic fuel oil storage tanks.

Both inner and outer tanks are pressure tested at the factory during assembly according to UL® standards and do not require further field testing. The DWT also comes with a detached saddle base which the tank is placed on at the time of installation. The tank shall be placed into service in accordance with local codes and the listed use (indoor or outdoor) on a flat, level and stable surface, away from heat sources, corrosive atmospheres or fluids, potential mechanical damage or rapid temperature changes. The final location must have the tank label visible after installation. A minimum of 2" (50 mm) from all walls or obstructions is recommended for normal tank expansion and visual inspection. The integral base support shall not be removed and raising the tank height is not allowed except on a continuous concrete platform at least 6" (150 mm) wider than the tank base at all sides. All local fire code set-backs for fuel oil storage tanks must be observed.

Tanks installed indoors shall not be exposed to direct sunlight on any plastic parts. Tanks installed outdoors shall be assembled with the required cover, All tanks must be installed with an approved vent alarm (Roth Vent Alarm #235000999, or equivalent sized UL listed whistle vent) in order to maintain warranty requirements.

-Tanks are available in sizes 110 Gallon (400 Liters), 165 Gallon (620 Liters), 275 Gallon (1000 Liters), 275 Gallon low height (1000 Liters low height), and 400 Gallon (1500 Liters).

-Each tank comes with a base, 2-3" plastic adapters and 2-metal adapters.

Double-Wall Oil Storage Tank

Part #	Description	Weight lbs. (kg)
2335103401	ROTH DWT 400L - 110 Gallon, UL Listed	99.23 (45)
2335101861	ROTH DWT 620L - 165 Gallon, UL Listed	136.71 (62)
2335101862	ROTH DWT 1000L - 275 Gallon, UL Listed	198.45 (90)
2335103722	ROTH DWT 1000LH - 275 Gallon, UL Listed	208 (94.4)
2335102642	ROTH DWT 1500L - 400 Gallon, UL Listed	312 (141.5)

INSTALLATION KITS AND TANK COVERS

Installation Kits for DWT



The installation kits have all the accessories you need combined in one kit for a single tank installation. You will only have to choose between the tank size and the 3/8" or 1/2" duplex bushing. One (1) male metal adaptor is installed in each tank

Part #	Description	Weight lbs. (kg)
2315000401	Kit 400L (Vent Alarm, gauge and 3/8" duplex bushing)	6.0 (2.8)
2315000402	Kit 400L (Vent Alarm, gauge and 1/2" duplex bushing)	6.0 (2.8)
2315001001	Kit 620L / 1000L (Vent Alarm, gauge and 3/8" duplex bushing)	6.0 (2.8)
2315001002	Kit 620L / 1000L (Vent Alarm, gauge and 1/2" duplex bushing)	6.0 (2.8)
2315001101	Kit 1000LH (Vent Alarm, gauge and 3/8" duplex bushing)	6.0 (2.8)
2315001102	Kit 1000LH (Vent Alarm, gauge and 1/2" duplex bushing)	6.0 (2.8)
2315001501	Kit 1500L (Vent Alarm, gauge and 3/8" duplex bushing)	6.0 (2.8)
2315001502	Kit 1500L (Vent Alarm, gauge and 1/2" duplex bushing)	6.0 (2.8)

Tank Cover

****Required for outdoor tank installations****



The Roth tank cover is designed and tested for outdoor installations. This cover is designed to protect the top of the tank from both mother nature's weather elements as well as harmful ultraviolet rays.






The cover length and width are not more than .5 in. greater than the overall length and width of the tank it is designed for. Overall height of the weather cover assembly is 18 inches, however requires a clearance of 24 inches vertical for full opening and closing due to its hinged style. This height accommodates a requirement in the CSA installation code for a 6 inch difference in elevation between the fuel fill fitting and the vent fitting. The cover door is hinged at the bottom with butt hinges. This ensures alignment of the cover when opening or closing and makes the cover easy to open and manage in adverse weather conditions as it swings down against the front of the tank.

- Handle(s), depending on size, on door to ease the process of opening and closing the door.
- Hasps on the sides of the cover to secure it and offer the opportunity to lock the cover to secure the tank against fuel theft.
- The door, hinge panel, hinges and associated hardware are pre-assembled, reducing field assembly time.
- Shipped unassembled except for the door and hinge panel as described above.
- May be used for multiple tank installations with separate fill and vent lines when fuel oil supply lines are manifolded outside the covers.

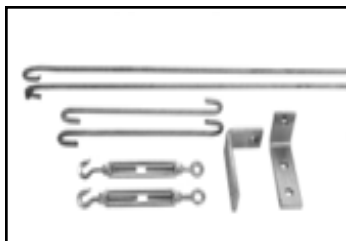
Part #	Description	Weight lbs. (kg)
2335100749	ROTH Tank Cover for 400L and 620L	15.21 (6.9)
2335100757	ROTH Tank Cover for 1000L	21 (9.5)
2335003721	ROTH Tank Cover for 1000LH	21 (9.5)
2335002054	ROTH Tank Cover for 1500L	32 (14.5)

EXPANSION KITS AND TIE DOWN KITS

Expansion Kits

	Part #	Description	Weight lbs. (kg)
	2315107012	ROTH Expansion Kit #1 Dual Tank Installation for 400L, 620L and 1000L	21.17 (9.6)
	2315107013	ROTH Expansion Kit #2 3rd, 4th and 5th Tanks; Added to Dual Tank Installation for 400L, 620L and 1000L	12.79 (5.8)
	2315105343	ROTH Expansion Kit #3 Front to Back Expansion for 1000L	30.87 (14)
	2315106910	ROTH Expansion Kit #4 Dual Tank Installation for 1000LH and 1500L	13.23 (6)
	2315106911	ROTH Expansion Kit #5 Added to Dual Tank Installation for 1000LH and 1500L	22.05 (10)

TIE DOWN KIT



To secure and tighten tanks in low and high risk areas
 -Clips over top rim of tank
 -Base bolts to floor/concrete
 -tumbuckles adjust tension
 -2 tie downs per kit
 -anchor/lag bolts supplied by installer
 -use one kit in low risk areas
 -use multiple kits in high risk areas

Part #	Description	Weight lbs. (kg)
2335000222	ROTH Tie Down Kit (2 per bag) for 400L	3 (1.4)
2335100222	ROTH Tie Down Kit (2 per bag) for 620L and 1000L	3 (1.4)
2335200222	ROTH Tie Down Kit (2 per bag) for 1000LH	3 (1.4)
2335400222	ROTH Tie Down Kit (2 per bag) for 1500L	3 (1.4)

OIL GAUGE, LEAK ALARM, TANK BASE

Oil Gauges



Each tank needs to be installed with an oil gauge. The gauge base is threaded 2” NPT with a rubber “O Ring” for sealing. It needs to be mounted on one of the plastic adapters provided with the tank with no need for pipe dope or Teflon tape on the threads. Must be hand tightened only . String and float must be released slowly during installation to prevent damage to the gearing or loosening the line off the reel. Housing design and color may differ depending on tank model.

Part #	Description	Weight lbs. (kg)
2335003411	Sealed Fuel Oil Gauge 400 L	0.44 (2)
2335001863	Sealed Fuel Oil Gauge 620 L and 1000 L	0.44 (2)
2335003832	Sealed Fuel Oil Gauge 1000 LH	0.44 (2)
2335000191	Sealed Fuel Oil Gauge 1500 L	0.44 (2)

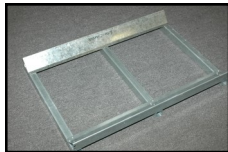
Leak Detector



Roth DWT tanks are equipped with a visual leak detector located between the tank walls. A tripped leak detector is a sign of oil in the interstitial area of the tank, but does not necessarily mean the inner bottle has failed. The lowest point on the top of the tank is the penetration for the leak detector. The leak detector installs in a rubber grommet, supplied with the detector. The detector float sensor will respond to the presence of liquid and raise the red alarm indicator. When tripped, the presence of oil has to be determined and cleaned up. The float sensor based leak detector may be cleaned and re-used.

Part #	Description	Weight lbs. (kg)
2335001643	ROTH Leak Detector for 400 L	2.65 (1.2)
2335021644	ROTH Leak Detector for 620 L and 1000 L	2.65 (1.2)
2335021645	ROTH Leak Detector for 1000 LH	2.65 (1.2)
2335021646	ROTH Leak Detector for 1500 L	2.65 (1.2)

Tank Base



Each Roth DWT is supplied with a base, made out of strong, hot dip galvanized, all assembled, weld-less steel, that gives a 2” clearance under the tank and offers stability of the tank. They are shipped completely assembled and packed upside down on the top of each tank protecting the tank connection during transport.

Part #	Description	Weight lbs. (kg)
2350007391	ROTH Tank Base for 400L - 110 Gallon and 620L- 165 Gallon	4.6 (2.1)
2335000643	ROTH Tank Base for 1000L- 275 Gallon	15.66 (7.1)
2335000743	ROTH Tank Base for 1000LH- 275 Gallon LH	15.66 (7.1)
2335001652	ROTH Tank Base for 1500L- 400 Gallon	10 (4.5)

DWT ACCESSORIES

Duplex Bushing



Roth duplex bushings are built to be installed directly into Roth tank's opening, are held in place by the Roth tank cap nut and do not require the use of an additional 2" NPT Die-Cast Adapter like a standard threaded tank bushing would. They are being supplied with their own gasket. Roth duplex bushings are available with a slip-through compression fittings for either 3/8" or 1/2" copper tubing for fuel supply and return lines. When a return line is not being used or replaced by a De-Aerator, one of the fittings could be replaced by a steel plug or could be used as a second supply line for a second appliance. If black iron supply line is more desirable than copper, the fitting could be removed and since the opening in the bushing are threaded either 3/8" or 1/2" NPT on top and bottom, the black iron pipes could be screwed directly in.

Part #	Description	Weight lbs. (kg)
2350000027	1/2" Duplex Bushing with fittings	2 (0.9)
2350000026	3/8" Duplex Bushing with fittings	2 (0.9)

Vent alarm



ALL TANKS MUST BE VENTED. Unless another UL[®] approved system for fill level detection is used, all tanks must have a vent alarm (whistle) installed. We require the use of our proprietary vent alarm in each tank. This vent alarm also provides a 2" NPT adapter for easy connection of your vent piping to the tank. The Roth Vent Alarm is installed in place of one of the plastic adapters in the top of the tank. Use the cap nut and a #3 gasket (already supplied with the Roth vent alarm) to secure the vent alarm in the manner described in the Roth DWT Installation Instruction Manual.

Part #	Description	Weight lbs. (kg)
2350000999	Vent Alarm 2" NPT	1 (0.45)

Fuel Oil De-Aerator



The use of an Oil De-Aerator with a top connected tank like the Roth DWT tank is a safer, more reliable and most economical way of installing a supply line for a burner. A De-Aerator will continuously separates air/gas from heating oil automatically, eliminates the risk for a return line leakage, and reduces the flow of oil drawn from the tank saving filter life. Oil being preheated in the loop to room temperature will eliminate problems associated with cold oil in the case of an outdoor tank installation and will improve burning efficiency, reducing energy cost for the end user.

Part #	Description	Weight lbs. (kg)
2335100191	ROTH Fuel Oil De-Aerator	2 (0.9)

Die Cast Adapter



Part #	Description	Weight lbs. (kg)
2350006801	ROTH Die Cast 2" FE	1 (0.45)

DWT ACCESSORIES

Cap Nut



The Roth cap nuts are supplied with every tank and are used to attach all of the accessories. They are specifically designed and engineered for the Roth tank. This allows all of our flanged fittings proper support.

Part #	Description	Weight lbs. (kg)
2350000024	ROTH Cap Nut	0.22 (0.1)

#3 Gasket



Part #	Description	Weight lbs. (kg)
2350000031	ROTH #3 Gasket	0.02 (0.01)

Plastic Wrench



Part #	Description	Weight lbs. (kg)
2350002223	ROTH Plastic Wrench	0.11 (0.05)

Bulkhead Nut



The bulk head nut is specifically designed to hold the bottle of the tank to the outer metal top of the tank

Part #	Description	Weight lbs. (kg)
2350005738	ROTH Bulkhead Nut	1 (0.45)

Waste Oil Filling Pan



The filling pan connects to the top of the tank using a 2" black iron pipe.

Part #	Description	Weight lbs. (kg)
2335000777	Filling Pan for DWT Waste Oil.	10 (4.5)

Waste Oil Hand Pump



Part #	Description	Weight lbs. (kg)
2335000779	Hand Pump DWT Waste Oil	3 (1.3)



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