

## Home Heat Tanks - Frequently Asked Questions

Here are some of the most frequently asked questions about home heat tank installations and inspections.

Installers should consult the Home Heat Tanks Regulations, the Home Heat Tank Systems Technical Standards Handbook, and Canadian Standards Association standard CSA B-139, Installation Code for Oil-burning Equipment (CSA B139). These documents supersede the information contained here.

Please Note: While the Department of Communities, Land and Environment attempts to ensure the information contained herein is correct, it does not accept liability for errors or omissions.

### Approved Standards Labels

#### **Must a tank have a ULC or other approved standards label in order to be inspected?**

Yes. Tanks without a ULC or other approved standards label cannot be inspected regardless of the age of the tank.

#### **What information must be on the label?**

Each label must contain the manufacturer's name, metal thickness, fuel capacity, serial number, and the year of manufacture. If any of this information is missing or incomplete the tank cannot be inspected.

#### **What if the ULC is painted over or unreadable?**

If the ULC label is painted over the owner shall take the necessary steps to remove the paint from the labels. If the label is unreadable the tank is considered past its expiry date and must be replaced.

### Filter Assembly

#### **Are fuel oil filters required?**

Yes. Fuel oil filters are required on all installations. Epoxy coated or non-metallic filters are required on new or replacement tanks.

#### **Where should filters be located?**

Filters must be located inside a building if at all feasible.

#### **Can the filter be installed at any point along the product line?**

Yes. However, care must be taken to ensure the filter assembly is properly supported.

#### **How often should filter casings be replaced?**

Since most filter casings are constructed from extremely thin metal, and may contain water, they should be inspected annually and replaced at the first sign of corrosion.

**Is there a set standard for fuel oil filters?**

Yes. Refer to the filter section CSA B139.

## **Fittings**

**Are cast iron fittings permitted to be used?**

No. Cast iron fittings shall not be used.

**Can compression fittings be used?**

No. Compression fittings shall not be used.

## **Inside Fuel Oil Tanks**

**Which fuel oil tanks can be used for an inside installation?**

After April 1, 2012, tanks must be non-metallic material or a double-bottom tank with bottom outlet. The only acceptable inside fuel oil tanks are those bearing ULC listing:

- a. ULC ORD-C80 "Aboveground Non-metallic Tanks for Fuel Oil" or ULC S-670 "Standard for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids".
- b. ULC S-602 "Aboveground Steel Tanks for Fuel Oil and Lubricating Oil".

## **Inspection Requirements**

**Must all oil tanks on PEI be inspected?**

No. Only tanks with a capacity of 2,200 litres or less, used as a fuel storage tank for heating residential, commercial, or other premises, are to be inspected and tagged under these regulations.

**Can a tank be tagged with an agreement to do an alteration at a later date?**

No. The tank must meet all installation requirements before it is tagged.

**Can a bottom outlet tank installed level instead of on angle towards the outlet end be inspected?**

No. All bottom outlet tanks shall be pitched towards the outlet with a longitudinal slope of not less than 1 in 50.

**What maintenance is needed?**

At least once a year the oil tank, tubing and piping should be visually inspected and replaced when needed. All outdoor tanks should be tested for water at the bottom of the tank. If water is found it must be removed. Refer to the maintenance section in the CSA B139.

## **Installation of Tanks in Residential Garages**

### **Can fuel oil tanks be installed in residential garages?**

Yes. The tank, its equipment, and the piping attached to it shall be protected from damage in accordance with good engineering practice (please refer to B139) if not already protected by its location. Posts and guardrails are recommended and be located not less than 4 inches from all sides of the tank.

## **Insurance**

### **Do licenced installers need environmental or pollution insurance?**

Yes. Licenced installers are required to hold insurance satisfactory to the Minister for bodily injury and property damage, including damages arising, during the period of coverage, from a contaminant being introduced in the environment in a sudden, unintended or unexpected occurrence. Please see regulations for details and contact your insurance provider for more information.

## **Outside Fuel Oil Tanks**

Which fuel oil tanks can be used for an outside installation?

After April 1, 2012, new or replacement tanks must be nonmetallic and must bear ULC listing (ULC ORD-C80 "Aboveground Non-metallic Tanks for Fuel Oil" or ULC S-670 "Standard for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids").

### **What type of piping outlet is required for an outside installation?**

After April 1, 2012 the connection to the tank must be a single line top feed connection. An end outlet connection or a bottom outlet connection is allowed in the case of a gravity supply tank.

## **Outside Weather Protection**

### **Must outside tanks have a valve protector?**

End outlet outside tanks must have a valve protector attached.

### **Can the protector be homemade?**

Yes. However care must be taken to ensure it is of sufficient construction to withstand the weight of accumulated snow and ice. As a certified installer your approval of a homemade protector may be considered professional advice should a mishap occur.

## **Product Line**

### **What type of tubing can be used for a product line?**

A product line can be brass, copper or steel tubing.

**Are coated copper product lines mandatory for installations which run under a foundation wall or building?**

When any portion of a product line runs below a foundation wall, under a floor, or under the ground, it shall be a continuous length of poly-coated non-corrosive copper tubing approved for fuel oil use. This coated product line shall be placed inside a second continuous length of tubing with both ends of the second length of tubing protruding a minimum of 50 mm (2 in) above ground/floor level. Installations before April 2000 can be a continuous length of uncoated product line inside a continuous length of tubing.

**Are expansion /vibration loops mandatory on all product lines?**

No. Expansive/vibration loops are mandatory for outside installations only.

**When must a product line be replaced?**

A product line must be replaced whenever a new tank is installed, or if the product line on an existing installation has to be lengthened or re-routed.

**Can an expansion loop be placed in an existing line?**

Yes. However, the entire line must be inspected to ensure all fittings are secure and of the proper type.

**Can a line be run behind a wall without being inside a continuous run of tubing?**

Yes. Line can also run above the ceiling. Unthreaded portion of piping shall extend at least 25 mm (1 in) through a finished ceiling.

**What is required when piping or tubing passes through an exterior or interior wall aboveground?**

Piping and tubing must be sealed watertight and the portion that runs through the exterior wall or interior wall of masonry or concrete shall be sleeved or double wrapped with a waterproof wrap.

**Is a top feed system mandatory for outside installations?**

Yes, a single line top feed connection is required in the case of a tank that is not a gravity supply tank. It should be noted that there may be a need for a de-aerator on single line top feed systems.

**Do the expiry years change when changing outlet from bottom to top feed single wall metallic tank?**

Yes. Five years is taken off the expiry date.

## **Reusing Tanks**

**Can fuel oil tanks be reused?**

Single walled metallic tanks cannot be re-used. Double-walled metallic tanks will be considered for inside use only and non-metallic tanks will be considered for outside or inside use. Tanks can only be re-used with permission of the authority having jurisdiction.

### **Separation Distance**

What is the minimum separation distance between an oil tank and an oil fired appliance?

The minimum distance between a tank and the closest part of any fuel fired appliance is 2 feet, with a minimum 18 inch clearance on one end and one side, and a minimum 2 inch clearance between the tank and the wall. If at all possible these minimum distances should be increased to allow working space for service personnel working on the furnace or tank.

### **What is the minimum permissible distance between an oil tank and an electrical panel?**

A minimum working space of 1 m with secure footing shall be provided. The installation does not interfere with the working space of any electrical panel or apparatus.

### **What is the minimum permissible distance between an oil tank and a propane tank?**

A propane tank with a capacity of 475 L or less may be installed adjacent to a fuel tank, provided that the capacity of the fuel oil tank is 250 gal (1,150 L) or less.

### **What is the required distance between a tank and a well?**

For new home construction the well and oil tank must be at least 5 metres (16.25 feet) apart for tanks greater than 1,200 litres or less in size, and at least 15 metres (48.75 feet) apart for tanks greater than 1,200 litres in size.

### **Is there a specific separation distance between a tank and a sump pit?**

No. However, common sense should be used to ensure oil cannot leak into a sump pit and result in a major environmental hazard.

## **Tags**

### **After April 1, 2012 does a licensee have to re-tag a system when altering or inspecting an existing tank?**

No. The licensee must fill out the inspection form with the existing tag information and submit a copy of the form to the owner and to the Department. Inspection forms are only available

### **After April 1, 2012 what are the tagging requirements for new or replacement double-bottom or non-metallic tanks?**

The licensee must tag the system with an identification date, no stamping required. Licensees can obtain tags and inspection report form booklets at Inspection Services, 31 Gordon Drive, Charlottetown. A copy of the inspection form must be completed and submitted to the owner and Inspection Services.

### **What if my tag is missing?**

Report the missing tag to 31 Gordon Drive, Charlottetown or contact Steven Townsend at 902-368-5567. It is possible that the tag fell off or was stolen. Contact a licenced contractor to re-inspect and tag your home heat tank system.

## **Tag Expiry**

### **When does my tank have to be replaced?**

As of April 1<sup>st</sup>, 2012 all tags expire June 30<sup>th</sup> of the expiry year. Non-metallic tanks or double-bottom tanks do not have an expiry year.

### **What is required in 2020?**

After July 1, 2020 all tank installations must be non-metallic. For example if your tag expires in 2025 then you would have to replace your tank with a non-metallic tank in 2025. It is always recommended that you check the condition of your tank often and replace it earlier if there are any signs of corrosion.

## **Tank Accessories**

### **Must all tanks have a vent whistle installed?**

Yes. All inside and outside tanks must have a working vent whistle.

### **Must all tanks have a fuel gauge installed?**

Although it is recommended that all tanks have a working fuel gauge, fuel gauges are only mandatory for inside installations. However, outside tanks without a fuel gauge must have the bung hole sealed to prevent any water from entering the tank.

## **Tank Support**

### **What is the minimum and maximum height for tank legs?**

The minimum height of tank legs is 4 inches and the maximum height is 12 inches.

### **Are tank stands permitted under the new Construction Standards?**

Yes. They can either be metal construction (minimum 2x2 inch tubular steel) or wooden construction (minimum 4x4 inch pressure treated lumber securely bolted together with a nut and washer. Lag bolts are not permitted. Details can be found in the Handbook.)

### **Can a fibreglass tank be put on a stand?**

Yes. Ensure that the tank cradle is securely resting on the cross piece. Tank should also be secured with a non-metallic strap. Contact the Inspection Services for additional information.

### **Must outside tanks be fastened to a house or other structure?**

A tank that may be exposed to strong winds should be secured against toppling.

### **Is there a height restriction on tank stands?**

No. There is no height restriction on tank stands.

## **Tank Support Base**

### **Must the tank support base have gravel and patio stones before passing inspection?**

If the existing tank support base is level, and constructed of a suitable and stable material, and if the tank has not reached its expiry date, it can be tagged in accordance with provincial regulations. It is not necessary to disassemble an acceptable system just because there is no gravel under the base.

### **When must gravel or tamped sand be used?**

Six inches of gravel or tamped sand is required for all new installations and for all tank replacements where the existing base is of an unsuitable or unstable material. If the existing base is of a suitable and stable material, a replacement tank can be installed on the same base without the use of tamped sand or gravel.

### **What is a suitable gravel base?**

The Construction Standard requires 6 inches of top soil to be removed and replaced with washed gravel or tamped sand.

### **When must a tank base be upgraded?**

A tank base must be upgraded to include gravel and reinforced patio stones if the tank support base is unstable or of a non-approved type.

### **Are 4x4 creosote timbers an acceptable tank support base?**

Yes. Creosote on existing installations are acceptable, however, they must be replaced by either 4x4 pressure treated lumber or reinforced patio stones when a replacement tank is installed.

### **What type of patio stones can be used?**

All patio stones for existing and new installations must be of the reinforced type. Tank systems with non-reinforced patio stones cannot be inspected under the Home Heat Tanks Regulations.

### **Is a poured cement pad acceptable, or must it be replaced with gravel and patio stones?**

A poured cement pad is completely acceptable if it is level and in good condition.

### **Can the gravel and patio stones be placed on top of the ground?**

Yes, as long as the gravel is encased in a pressure treated enclosure.

### **Are shimmies allowed under the tank legs?**

Shimmies are only allowed on inside tanks but they are not recommended.

## **Vent and Fill Pipes**

### **What material can the vent and fill pipe be constructed of?**

Vent and fill pipes must be either steel or galvanize construction.

### **Is copper piping acceptable for a vent or fill pipe?**

Copper vent and fill pipes cannot be used on any installation or replacement after April 2000.

**Must the vent pipe be taller than the fill pipe?**

The vent pipe must terminate at least 6 inches above the entry to the fill pipe.

**What is the minimum distance required between a vent and fill pipe opening and a door or window designed to be opened?**

The vent and fill pipe opening must be a minimum of 2 feet from any door or window designed to be opened.

**Can the vent and fill pipe terminate 2 feet below the opening of a window?**

Yes.

**What is the minimum distance between a vent or fill pipe opening and a dryer vent, air exchange vent, or any other similar vent?**

The minimum distance required between a vent and fill pipe opening, and a dryer vent, air exchange vent, or any other similar vent, is 2 feet, except in the case of a power intake vent which requires a minimum 3 foot separation distance.

**When twinning two or more tanks together, does the vent size change?**

Yes. The vent size increases from 1¼ inches to 2 inches for tanks using individual vent pipes. If two or more vent pipes are twinned to a common manifold, the vent pipes must be 2 inches while the common manifold must be 3 inches.

**Is there a minimum length for the fill pipe above an elbow?**

Yes. The fill pipe must terminate a minimum of 8 inches above an elbow.