

## STANDARD INFORMATION

**Standard Number:** ULC S602

**Standard Name:** Aboveground Steel Tanks for Fuel Oil and Lubricating Oil

**Standard Edition and Issue Date:** 5<sup>th</sup> Edition Dated November 1, 2003 and 6<sup>th</sup> Edition Dated October 1, 2014

**Date of Revision:** June 6, 2005, September 30, 2007, October 1, 2014 and December 1, 2015

**Date of Previous Revision of Standard:** November 1, 2003

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **December 30, 2019**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** A review of all Listing Reports is necessary to determine which products comply with new/revise requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

### Overview of Changes:

#### June 6, 2005:

- Revisions to marking lettering sizes

#### September 30, 2007:

- Increased thickness for single tank walls
- New requirement for welding procedure
- Added requirement for fittings to be above the highest liquid level
- Revised requirements for open secondary containment markings
- Updated markings for tanks

#### October 1, 2014:

- Enhanced welding requirements
- New requirement for temporary enclosures
- New requirement for spill containment devices
- Enhanced requirements for secondary containment and double bottom tank

#### December 1, 2015:

- New marking requirement which does not allow Oil Transfer Pump Over

Specific details of new/revise requirements are found in table below.



If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

**Client Action Required:**

**Information** – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

**Current Listings Not Active?** – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

**STANDARD INFORMATION**

CLAUSE	VERDICT	COMMENT
<p>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined out</del> below.</p>		
<p><b>The revisions dated June 6, 2005 were issued to incorporate the following:</b></p>		
		<p><b>MARKING</b></p>
9		<p>The revisions specify more appropriate letter size for markings.</p>
<p><b>The revisions dated September 30, 2007 were issued to incorporate the following:</b></p>		
4	Info	<p><b>CONSTRUCTION</b></p>
4.2	Info	<p><b>MATERIALS</b></p>
4.2.3		<p>Minimum thickness for single wall tanks increased in revised Table 1.</p>
4.3	Info	<p><b>WELDING</b></p>
4.3.1		<p>Removed requirements for an arc welding operator identification certificate and replace with requirement for the manufacturing facility to have an appropriate welding procedure and to ensure that each operator be duly trained and qualified.</p>
4.7	Info	<p><b>FILL, VENT, GAUGE AND OTHER OPENINGS</b></p>
4.7.1		<p>Removed requirement that fittings be on the top center line and added requirement that the referenced fittings be above the highest liquid level.</p>
4.8	Info	<p><b>TANK SUPPORT</b></p>
4.8.1		<p>Each tank is now required to be supplied with support bracket, cradles etc.</p>
4.8.2		<p>Reference to Ballast Stability Test removed.</p>



5	Info	<b>SECONDARY CONTAINMENT</b>
5.4	Info	<b>OPEN SECONDARY CONTAINMENT</b>
5.4.1	Info	<b>General</b>
5.4.1.2		Revised to require open secondary containments be marked for inside use in accordance with 9.3E
8	Info	<b>COATING</b>
8.1		Revised to state that the exterior primer or coating is to be applied in accordance with the manufacturers' instructions.
9	Info	<b>MARKING</b>
9.1		Required marking 8F, 8G and 8H revised.
9.3		Required marking 8A to 8E revised, 8f and 8G new.
9.4		Required marking revised.
10	Info	<b>INSTALLATION AND MAINTENANCE INSTRUCTIONS</b>
10.1		Requirements for Installation and Maintenance Instructions added.
<b>The revisions dated October 1, 2014 were issued to incorporate the following:</b>		
4	Info	<b>CONSTRUCTION</b>
4.6	Info	<b>CONNECTIONS</b>
4.6.5		New 4.6.5 prohibits side outlets for primary tanks and restricts them to areas with secondary containment.
4.11		New 4.11 requires any spill containers provided around fill or other top openings to now comply with all applicable requirements in ULC-S663 and new marking 9.1 H).
6	Info	<b>DOUBLE BOTTOM TANK</b>
6.1	Info	<b>CONSTRUCTION</b>
6.1.2		Revised 6.1.2 now requires bottom coverage up to 50 mm head height for only obround & cylindrical tanks.
6.1.4		New 6.1.4 now requires a minimum 27 mm ID interstitial vent, which may be combined with 6.1.3.
7	Info	<b>PERFORMANCE</b>
7.4	Info	<b>TANK SUPPORT TEST</b>
7.4.1		7.4.1 clarifies no tip over is part of the pass/fail criteria as previously interpreted by UL/ULC Staff, but new 305 mm pipe leg length for tanks with threaded leg brackets is different from tests previously conducted per the manufacturer's instructions.
7.5	info	<b>STABILITY TEST</b>
7.5.1		7.5.1 clarifies no damage, tip over or permanent deformation, is part of the pass/fail criteria as previously interpreted by UL/ULC Staff, but new 305 mm pipe leg length for tanks with threaded leg brackets is different from tests previously conducted per the manufacturer's instructions.



9	Info	<b>MARKING</b>
		Revised 9.1 C) clarifies metal thickness mark is nominal and for the primary tank.
		New 9.1 H) adds mark to identify spill containers compliant with new 4.11.1 option.
9.1		Old 8.3 F) deleted - mark to not vent a double bottom to atmosphere.
		Revised 9.3 F) (Old 8.3 G)) modifies terms & instructions for double bottom monitoring port.
10	Info	<b>INSTALLATION AND MAINTENANCE INSTRUCTIONS</b>
		New 10.1 C) adds emergency venting information.
10.1		Revised 10.1 D) (old 9.2 C)) deletes “prior to installation” for installer requirements.

**TYPICAL DOUBLE BOTTOM DESIGN FOR RECTANGULAR OR VERTICAL TANK**

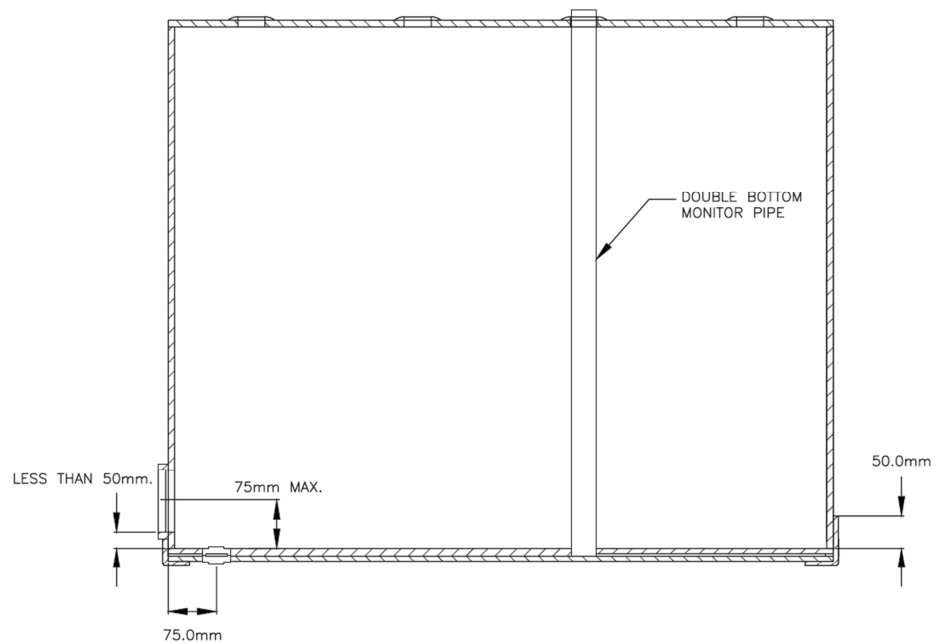


Figure 10



**TYPICAL DOUBLE BOTTOM DESIGN FOR HORIZONTAL CYLINDRICAL OR OBOUND TANK**

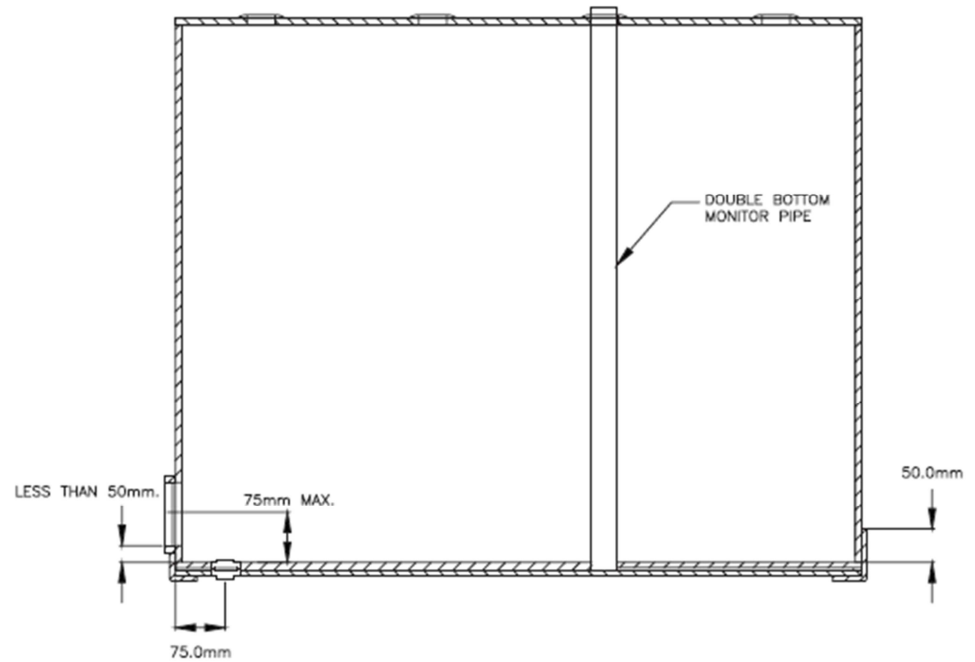


Figure 11



BOTTOM OF THE OPENING SHALL BE WITHIN THE AREA OF THE DOUBLE BOTTOM OR SECONDARY CONTAINMENT



The revision dated December 1, 2015 was issued to incorporate the following:		
9	Info	<b>MARKING</b>
9.3		New 9.3 G) adds “Do Not Transfer Oil from Old Tank into This Tank” and << Ne pas transférer d’huile de l’ancien réservoir dans ce réservoir >>.
CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.		