



**Summary of Substantive Changes
between the 2005 and 2010 editions of
CSA B66, “Design, material, and manufacturing requirements for prefabricated
septic tanks and sewage holding tanks”**

Presented to the IAPMO Standards Review Committee on April 8, 2013

General: The changes to this standard will have an impact on currently listed products. The major changes are:

- Expanded the scope to include extruded PE and PVC tanks (see Section 1.1)
- Revised requirements for inlet and outlet connectors (see Section 4.1.5)
- Added an equivalency performance test for septic tanks (see Section 4.2.9 and Annex B).
- Revised the requirements for fibre-reinforced concrete tanks (see Section 6.1.3.3)
- Added requirements for extruded PE and PVC tanks (see Section 8.2)
- Added the partition test (see Section 9.3)
- Changed the watertightness test (see Section 9.4)
- Added an alternative stress crack resistance test for polyethylene tanks (see Section 9.6)
- Revised the marking requirements (see Section 10.2)

Section 1, Scope: The standard formerly covered molded polyethylene and was expanded to include extruded polyethylene (PE) and polyvinylchloride (PVC) tanks.

Section 4.1.5, Inlet and outlet connectors: Revised the requirements for inlet and outlet connectors:
Section 4.1.5.1: Revised the requirements for inlet and outlet connectors for gravity flow applications.

Section 4.1.5.2: Added new requirements for inlet and outlet connectors for pressure flow connections.

Section 4.1.5.3: Added new requirements for the allowable installation methods of inlet and outlet connectors.

Section 4.2.2, Liquid depth:

Section 4.2.2.3: Added an exception for the operating liquid depth for septic tanks.

Section 4.2.3.3, Baffle or open-topped outlet fitting: Revised the required baffle height as follows:

A baffle or the top of an open-topped outlet fitting shall be extended vertically to at least 100 mm above the liquid level ~~the height of the top of the chamber divider or partition to which it is attached.~~

Section, 4.2.4 Scum capacity/air space:

Section 4.2.4.2: Added an exception for the required air space for septic tanks.

Section 4.2.9, Equivalency test: Added a new equivalency performance test for shallow septic tanks as follows:



[Septic tank designs that do not meet the requirements of Clauses 4.2.2 to 4.2.5 and 4.2.8 shall be deemed acceptable if they meet the equivalency testing requirements specified in Annex B.](#)

Section 6.1.3.3, Alternative reinforcement: Revised the requirements for fibre-reinforced concrete tanks:

Section 6.1.3.3.1: Added new requirements for synthetic fibres and included an option for compliance with ASTM C1690 to determine the minimum residual strength ratio.

Section 6.1.3.3.2: Added testing method and requirement for compliance with ASTM C1609 and revised the requirements for compliance with ASTM C1399 and ASTM C78

Section 6.1.3.3.5: Added the requirement for periodic testing as follows:

[Concrete shall be tested in accordance with Clause 6.1.3.3.2 at least every five years and whenever there is a material change in the concrete mix design.](#)

Section 8.2 Extruded polyethylene and polyvinylchloride tanks: Added requirements for the compound, stiffness, and end wall thickness of extruded polyethylene (PE) and polyvinylchloride (PVC) tanks.

9.2.2 Vacuum test for concrete, [extruded polyethylene and polyvinylchloride](#), and fibreglass-reinforced polyester tanks: The vacuum test now covers PE and PVC tanks.

Section 9.3, Chamber divider and partition tests:

Section 9.3.2, Partition (tank divider) Test: Added the partition test.

Section 9.4, Watertightness test: Changed the watertightness test.

Section 9.6, Environmental stress crack resistance test: Added an alternative stress crack resistance test for polyethylene tanks as follows:

Stress crack resistance for polyethylene tanks shall be at least 150 h when measured in accordance with ASTM D1693. [Alternatively, the stress crack resistance for polyethylene tanks shall be determined as follows:....](#)

Section 10, Markings and instructions:

Section 10.2, Information: Revised the marking requirements as follows:

(c) the working capacity of the [chambers tank](#), expressed in litres

[\(d\)\(e\) the volume of the chamber\(s\) per centimetre of depth, per flush](#), expressed in litres;

[\(j\) the symbol or logo of the certifying agency.](#)

Annex B, Equivalency testing: Added a normative (mandatory) annex for an equivalency performance test (see Section 4.2.9)