

# THERMAL EXPANSION TANK (SUSPENDED)

**7.6.1.16.(1) Thermal Expansion.** Protection against thermal expansion shall be required when a *check valve* is required by Article 7.6.1.10., a *backflow preventer* is required by Article 7.6.2.2., or a pressure reducing valve is required by Article 7.6.3.3.

**A-7.6.1.16.(1) Thermal Expansion.** Closed water systems with no expansion to public water systems need to accommodate thermal expansion using one of the following:

(i) an expansion tank designed for use on the cold or hot potable water system , or

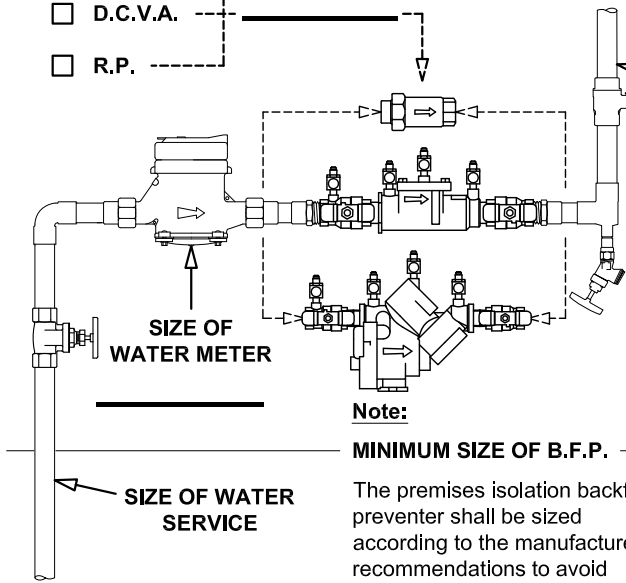
(ii) a thermal relief valve piped to a drain forming an air break conforming to CSA B125, "Plumbing Fittings,".

The installation of a Backflow Preventer on the Water Distribution Piping entering the building creates a closed system in turn creating a situation where the hot water tank can increase pressure within the system through thermal expansion.

The Thermal Expansion Tank absorbs any increase in water pressure caused by thermal expansion prolonging T&P Relief Valves. Tank is pre-charged below incoming supply pressure.

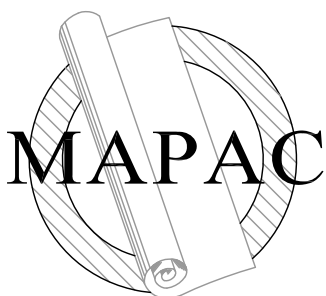
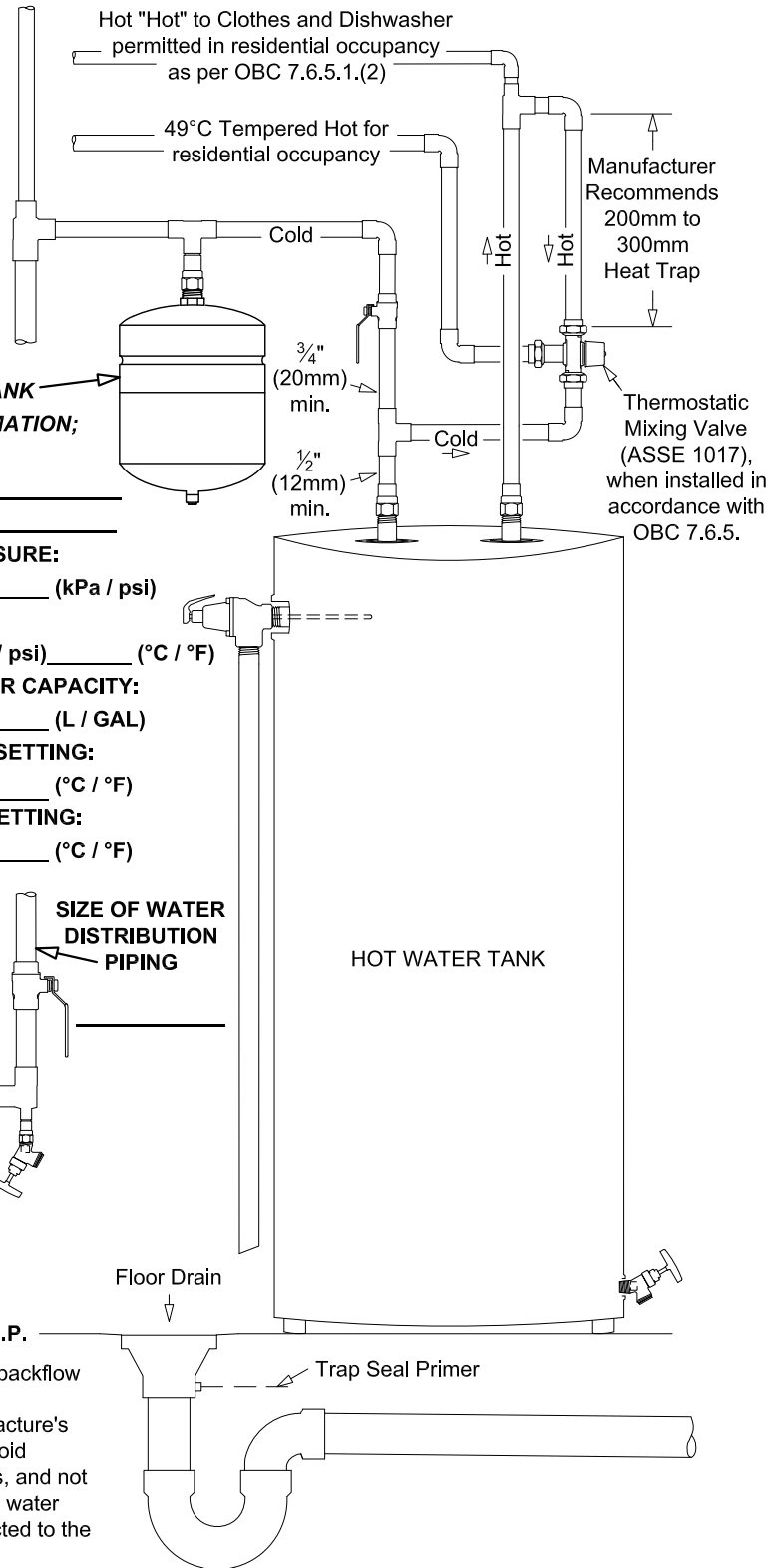
**TYPE AND SIZE OF BACKFLOW PREVENTER**

- Du.C.
- D.C.V.A.
- R.P.



**THERMAL EXPANSION TANK SIZING INFORMATION;**

**MAKE:** \_\_\_\_\_  
**MODEL:** \_\_\_\_\_  
**SUPPLY PRESSURE:** \_\_\_\_\_ (kPa / psi)  
**RELIEF VALVE:** \_\_\_\_\_ (kPa / psi) \_\_\_\_\_ (°C / °F)  
**WATER HEATER CAPACITY:** \_\_\_\_\_ (L / GAL)  
**INITIAL TEMP. SETTING:** \_\_\_\_\_ (°C / °F)  
**FINAL TEMP. SETTING:** \_\_\_\_\_ (°C / °F)



**METRO AREA PLUMBING ADVISORY COMMITTEE**  
*Subcommittee of the Toronto Area Chief Building Officials Committee*

TITLE			Premise Isolation and Thermal Expansion Piping Mounted, Suspended Tank.		
SCALE	NONE	DWN	R. BLUNDEL	Jan. 20, 2010	
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