

Builder Tip WATER CONSERVATION FOR DWELLINGS

## ONTARIO BUILDING CODE

#### 7.6.4. Water Efficiency

### 7.6.4.1. Water Supply Fittings

(1) The flow rates of fittings that supply water to a *fixture* shall not exceed the maximum flow rates at the test pressures listed for that fitting in Table 7.6.4.1.

# Table 7.6.4.1.Maximum Flow Rates for Water Supply Fittings

Item	Column 1	Column 2	Column 3
	Fitting	Maximum Flow, L/min	Test Pressure, kPa
1.	Lavatory Faucet	8.35	413
2.	Kitchen Faucet	8.35	413
3.	Shower Heads in Residential Occupancy	7.6	550
4.	Shower Heads in Other Occupancies	9.5	550

Forming Part of Sentence 7.6.4.1.(1)

(2) Sentence (1) does not apply to a *fixture* located in a *heritage building*.

#### 7.6.4.2. Plumbing Fixtures

(1) Water closets and urinals shall be certified to CAN/CSA-B45.0, "General Requirements for Plumbing Fixtures".

(3) In *buildings* classified as Group C *occupancy*, the flush cycle for each *fixture* that is a water closet or urinal shall not exceed the maximum water consumption per flush cycle listed for that *fixture* in Table 7.6.4.2.B.

#### Table 7.6.4.2.B.

## Maximum Water Consumption per Flush Cycle for Sanitary Fixtures in a Group C Occupancy

Forming Part of Sentence 7.6.4.2.(3)

ltem	Column 1	Column 2
	Fixture	Maximum Water Consumption per Flush Cycle, LPF
1.	Water Closet (Tank Type)	4.8 <sup>(1)</sup>
2.	Water Closet (Direct Flush)	4.8
3.	Urinal (Tank Type)	1.9 <sup>(2)</sup>
4.	Urinal (Direct Flush)	1.9 <sup>(2)</sup>

#### Notes to Table 7.6.4.2.B.:

<sup>(1)</sup> Water closets which provide a dual flush cycle option of both 4.1 LPF or less and 6.0 LPF are deemed to comply.

 $^{(2)}$  Urinals equipped with automatic flushing devices shall be controlled to prevent unnecessary flush cycles during *building* down time.

(4) Sentences (2) and (3) do not apply to a *fixture* located in an existing *building* where the *chief building* official is satisfied that compliance with the requirement is impracticable because of maintenance or operational difficulties.

## OBJECTIVE

Water conservation is a high priority for the Province of Ontario and the City of Markham. The 2012 Building Code supports conserving Ontario's water with the Water Opportunities and Water Conservation Act, 2010, which received Royal Assent on November 29, 2010.

The Building Code can support water conservation through mandatory efficiency measures and enabling provisions that promote the use of non-potable water for a range of purposes. The maximum flush cycle for water closets can be considered as method of meeting the objective to avoid excessive water consumption and to reduce the risk of depletion of this natural resource. Therefore, the Building Code requires;

- A tank-type water closet to have a maximum litres per flush (LPF) of 4.8., or
- A dual flush cycle water closest is permitted to have a maximum 4.1 LPF or less and 6 LPF, and
- Restricting the flow velocity for shower heads in residential occupancies to a maximum of 7.6 liters per minute.

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