

Consolidated Clause in Planning and Transportation Committee Report 4, which was considered by City Council on June 27, 28 and 29, 2006.

9

Proposed Change to National Plumbing Code: Hot Water Delivery in Buildings

City Council on June 27, 28 and 29, 2006, adopted this Clause without amendment.

The Planning and Transportation Committee recommends that City Council adopt the staff recommendations in the Recommendations Section of the report (May 17, 2006) from the Chief Building Official and Executive Director.

Purpose:

To recommend Council support of the proposed interim change to the model National Plumbing Code that would limit the temperature of water supplied in buildings and set a maximum temperature of service water heaters. The proposed change is part of the Canadian Commission on Building and Fire Codes' national public review taking place from May 1 to June 30, 2006.

Financial Implications and Impact Statement:

There are no financial implications arising from this report.

Recommendations:

It is recommended that:

- (1) Council convey its support to the Canadian Commission on Building and Fire Codes on the interim technical changes regulating hot water storage and delivery at fixtures, including requirements for lavatories and bathtubs/showers in particular, as part of the national public review; and
- (2) this report be forwarded to the Board of Health for information.

Background:

Nationally, over 300 children, elderly people and people with disabilities are treated in hospitals each year in Canada for hot tap water scalds. In 2003, 158 children under six years of age in Ontario visited emergency departments for treatment of hot tap water burns; 17 children were hospitalized for their scald injuries (Provincial Health Planning Database v16.0 Ambulatory Visits & Hospital Inpatient Data, 2003 Calendar Year, MOHLTC). Hot tap water burn injuries

are one of the most severe childhood injuries requiring initial hospital stays of 21 to 35 days for pain control, fluid balance, and multiple surgeries. In addition, repeated surgery is often required to release damaged skin as the child grows. These are preventable injuries.

Safe Kids Canada, the national injury prevention program at the Hospital for Sick Children, estimates that tap water scald injuries cost more than \$5 million annually in direct health care costs. This estimate does not include cost for skin grafts, physical therapy, counseling or supportive devices or aids required during recovery.

In the spring of 2003, the City of Toronto fully participated in the public consultation on proposed national and provincial code changes, including the proposal to require hot water delivery in homes to be controlled at 49°C. City Council supported this change by way of endorsing the report from Urban Development Services on the “Response to the Ontario Code Consultation” at its June, 2003 meeting. Toronto Public Health provided written support for the proposed code amendments in that report and in a report dated April 29, 2003 to the Board of Health.

In February 2004, the Ontario Ministry of Municipal Affairs announced that effective September 1, 2004, the Ontario Building Code will require that hot water delivered to faucets in residential dwellings be no higher than 49°C. The model National Plumbing Code was not amended at that time.

Comments:

Model National Codes

The administration of building, fire and plumbing codes, in Canada, is a matter of provincial jurisdiction. The national codes are “model” codes without authority, unless they are adopted in whole, or in part, by the provinces. Ontario has adopted components of the “model” national codes in the provincial building and fire codes. Ontario’s codes also contain requirements (e.g., energy efficiency, renovation) that are not contained in the national codes. A change to the national code, therefore, does not become part of the provincial code, unless it is adopted by the province.

2004 Ontario Building Code Amendment

As a result of the 2004 Ontario Building Code amendment, hot water supplied to all fixtures in residential occupancies is required to be at temperatures no higher than 49°C. This largely affects new construction. However, existing buildings are only impacted when existing plumbing systems are expanded.

The provincial code amendment regulating hot water temperature was made by the province separately from the larger group of changes that will be incorporated in the next edition of the Ontario Building Code, in 2006.

Public Consultation on Changes to the National Plumbing Code

The Canadian Commission on Building and Fire Codes (CCBFC) agreed in January 2006 to consult on proposed interim changes to the National Plumbing Code provisions regulating hot water delivery in buildings. From May 1 to June 30, 2006 the CCBFC is accepting public comments for review by the standing committees in the fall of 2006. The CCBFC will then consider the report and recommendations of the standing committee. If approved, the proposed changes would be considered as interim changes for inclusion in the 2005 National Building and Plumbing Code. Building Division technical staff sits on the standing committee considering this change and the Chief Building Official is a member of the CCBFC.

The proposed changes to article 2.2.10.7 (1), (2) and (5) of the National Building and Plumbing Code would require that hot water delivered to bathtubs, showers and lavatories shall not exceed 49°C.

Article 2.6.1.12 in the proposed code changes would require that water in hot water tanks must be stored at 60°C or higher.

The proposed change to Articles 2.2.10.7(1), (2) and (5) of the National Plumbing Code offer greater protection in the home to children and vulnerable adults and are in line with the 2004 Ontario Building Code Amendment regulating delivery of hot tap water in residential occupancies. The proposed minimum storage temperature for service water heaters of 60°C is a change from previous industry regulations of a maximum storage temperature of 60°C. To compensate for the additional risk associated extreme storage temperatures, lavatories and bathtubs / showers have been regulated to deliver water at lowered temperatures.

It is recommended that Council convey its support to the Canadian Commission on Building and Fire Codes on the interim technical changes regulating hot water storage and delivery at fixtures as part of the national public review.

Conclusions:

This report recommends that Council support the proposed changes to the National Building and Plumbing Code which is an important step towards reducing hot tap water scald injuries, especially to young children and the elderly.

Contact:

Dylan Aster
Policy Advisor
Building Division
(416) 338-5737
daster@toronto.ca