

[Submit a comment](#)

## Proposed Change 1959

---

<b>Code Reference(s):</b>	<b>NPC20 Div.A 1.2.2.2.(1) (first printing)</b> <b>NPC20 Div.A 1.4.1.2.(1) (first printing)</b> <b>NPC20 Div.A 3.2.1.1. (first printing)</b>
Subject:	Defined Terms
Title:	Replacement of the Defined Term "Fixture" with "Plumbing Fixture"
Description:	This proposed change revises the defined term "fixture" in the NPC to "plumbing fixture."
Related Proposed Change(s):	PCF 1690, PCF 1692, PCF 2014

This change could potentially affect the following topic areas:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Division A                                | <input type="checkbox"/> Division B                        |
| <input type="checkbox"/> Division C   | <input type="checkbox"/> Design and Construction           |
| <input type="checkbox"/> Building operations                                  | <input type="checkbox"/> Housing                           |
| <input type="checkbox"/> Small Buildings                                      | <input type="checkbox"/> Large Buildings                   |
| <input type="checkbox"/> Fire Protection                                      | <input type="checkbox"/> Occupant safety in use            |
| <input type="checkbox"/> Accessibility  | <input type="checkbox"/> Structural Requirements           |
| <input type="checkbox"/> Building Envelope                                    | <input type="checkbox"/> Energy Efficiency                 |
| <input checked="" type="checkbox"/> Heating, Ventilating and Air Conditioning | <input checked="" type="checkbox"/> Plumbing               |
|   | <input type="checkbox"/> Construction and Demolition Sites |

---

## Problem

---

In the National Building Code of Canada (NBC), the National Energy Code of Canada for Buildings (NECB) and the National Fire Code of Canada (NFC), "fixture" is a non-defined term that is variously used to refer to lighting fixtures, furnishings or equipment, ceiling fixtures, etc. In the National Plumbing Code of Canada (NPC), however, "fixture" is a defined term that refers to "a receptacle, appliance, apparatus or other device that discharges sewage or clear-water waste, and includes a floor drain."

The varied use of the term "fixture" across the Codes may create confusion for Code users. Clarification of the defined term in the NPC is needed to reduce the risk of interpretation errors, which could lead to improper application of Code requirements.

---

## Justification

---

The proposed change would clarify the existing defined term “fixture” in the NPC with the addition of a qualifier, “plumbing,” to ensure that there is no doubt as to when the term is being used to refer to plumbing fixtures as defined in the Code. This clarification would limit the probability of confusion for Code users and the risk of related compliance issues.

The change would also

- replace the defined term “fixture” with “plumbing fixture” everywhere else that it is referenced in Division A of the NPC for consistency, and
- expand the definition of the term by adding “neutralized condensate” to the list of waste types discharged by the receptacle or device.

The addition of “neutralized condensate” to the definition was proposed in response to the growth in high-efficiency appliances whose combustion byproducts include water and other chemicals typically defined as condensate. These condensates are generally considered to be compatible with most plumbing systems but may have an elevated acidity. The industry has developed processes to neutralize the acidity of condensate waste and discharge it into plumbing systems for disposal with the rest of the plumbing waste stream. The reference to this highly specialized activity was proposed to minimize the risk of condensate from high-efficiency appliances being confused with condensation from other water collection technologies or processes in other mechanical systems.

Note: A proposed change to a defined term does not need to identify every accompanying revision that would be made to the Code, only those that require the attention of Code users. The revised term would automatically apply wherever the current defined term is used.

---

## PROPOSED CHANGE

---

### **[1.2.2.2.] 1.2.2.2. Used Materials and Equipment**

- [1] 1)** Used materials and equipment, including *plumbing fixtures*, shall not be reused unless they meet the requirements of this Code for new materials and equipment and are otherwise satisfactory for their intended use.

---

### **[1.4.1.2.] 1.4.1.2. Defined Terms**

- [1] 1)** The words and terms in italics in this Code shall have the following meanings (an asterisk (\*) following a defined word or term indicates that the definition for that word or term is taken from the NBC):

*Air break* means the unobstructed vertical distance between the lowest point of an *indirectly connected sanitary drainage pipe* and the *flood level rim* of the *plumbing fixture* into which it discharges. (See Note A-2.3.3.11.(2) of Division B.)

*Air gap* means the unobstructed vertical distance through air between the lowest point of a water supply outlet and the *flood level rim* of the *plumbing fixture* or device into which the outlet discharges. (See Note A-2.6.2.9.(2) of Division B.)

*Bathroom group* means a group of *plumbingplumbing fixtures* installed in the same room, consisting of one domestic-type lavatory, one water closet and either one bathtub (with or without a shower) or one one-head shower.

*Circuit vent* means a *vent pipe* that serves a number of *plumbing fixtures* and connects to the *fixture drain* of the most upstream *plumbing fixture*.

*Drainage system* means an assembly of pipes, fittings, *plumbing fixtures*, *traps* and appurtenances that is used to convey *sewage*, *clear-water waste* or *storm water* to a public sewer or a *private sewage disposal system*, but does not include *subsoil drainage pipes*. (See Figure A-1.4.1.2.(1)-F in Note A-1.4.1.2.(1).)

*Dual vent* means a *vent pipe* that serves 2 *plumbing fixtures* and connects at the junction of the *trap arms*. (See Figure A-1.4.1.2.(1)-G in Note A-1.4.1.2.(1).)

*Emergency floor drain* means a *plumbing fixture* for the purposes of overflow protection that does not receive regular discharge from other *plumbing fixtures*, other than from a *trap primer*. (See Appendix A.)

*Plumbing Fixture* means a receptacle, appliance, apparatus or other device that discharges *sewage*, *or clear-water waste*, *or neutralized condensate* and includes a floor drain.

*Fixture drain* means the pipe that connects a *trap* serving a *plumbing fixture* to another part of a *drainage system*.

*Fixture outlet pipe* means a pipe that connects the waste opening of a *fixture* to the *trap* serving the *plumbing fixture*. (See Figure A-1.4.1.2.(1)-H in Note A-1.4.1.2.(1).)

*Fixture unit* (as applying to *water distribution systems*) means the unit of measure based on the rate of supply, time of operation and frequency of use of a *plumbing fixture* or outlet that expresses the hydraulic load that is imposed by that *plumbing fixture* or outlet on the supply system.

*Flood level rim* means the top edge at which water can overflow from a *plumbing fixture* or device. (See Figure A-1.4.1.2.(1)-B in Note A-1.4.1.2.(1).)

*Individual vent* means a *vent pipe* that serves one *plumbing fixture*.

*Private use* (as applying to the classification of *plumbingplumbing fixtures*) means *plumbing fixtures* in residences and apartments, in private bathrooms of hotels, and in similar installations in other *buildings* for one family or an individual.

*Public use* (as applying to the classification of *plumbingplumbing fixtures*)

means *plumbing fixtures* in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installations where *plumbing fixtures* are installed so that their use is unrestricted.

*Storey* for the purposes of this Code, means the interval between 2 successive floor levels, including mezzanine floors that contain *plumbing fixtures*, or between a floor level and roof.

*Trap standard* means the *trap* for a *plumbing fixture* that is integral with the support for the *plumbing fixture*.

*Water distribution system* means an assembly of pipes, fittings, valves and appurtenances that conveys water from the *water service pipe* or *private water supply system* to water supply outlets, *plumbing fixtures*, appliances and devices.

*Wet vent* means a *sanitary drainage pipe* that also serves as a *vent pipe* and extends from the most downstream wet-vented *plumbing fixture* connection to the most upstream *plumbing fixture* connection. (See Note A-2.5.8.1.(2) of Division B.)

#### **Note A-1.4.1.2.(1) Defined Terms.**

##### **Emergency Floor Drains**

There are two types of floor drains. One is an emergency floor drain installed to avoid flooding in a building from any pipe or *plumbing fixture* failure. The other encompasses floor drains installed to receive discharge from specific pieces of equipment; this type is defined as a *plumbing fixture*.

---

#### **[3.2.1.1.] 3.2.1.1. Functional Statements**

**[1] 1)** The objectives of this Code are achieved by measures, such as those described in the acceptable solutions in Division B, that are intended to allow the *plumbing system* to perform the following functions (see Note A-3.2.1.1.(1)):

- F01** To minimize the risk of accidental ignition.
- F02** To limit the severity and effects of fire or explosions.
- F20** To support and withstand expected loads and forces.
- F21** To limit or accommodate dimensional change.
- F30** To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.
- F31** To minimize the risk of injury to persons as a result of contact with hot surfaces or substances.
- F40** To limit the level of contaminants.
- F41** To minimize the risk of generation of contaminants.
- F43** To minimize the risk of release of hazardous substances.
- F45** To minimize the risk of the spread of disease through communal

shower facilities.

- F46** To minimize the risk of contamination of *potable* water.
- F62** To facilitate the dissipation of water and moisture from the *building*.
- F70** To provide *potable* water.
- F71** To provide facilities for personal hygiene.
- F72** To provide facilities for the sanitary disposal of human and domestic wastes.
- F80** To resist deterioration resulting from expected service conditions.
- F81** To minimize the risk of malfunction, interference, damage, tampering, lack of use or misuse.
- F82** To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance.
- F130** To limit the unnecessary demand and/or consumption of water for *plumbing fixtures*.
- F131** To limit the unnecessary demand and/or consumption of water for fittings.

---

## Impact analysis

---

There are no cost implications to the proposed change, as the clarification of the defined term does not impact the application of the provisions in which it is used.

The proposed change would provide clarification and consistency. No additional enforcement measures or materials would be needed.

---

## Enforcement implications

---

This proposed change would assist building designers and regulators, as the definition would be clearer.

---

## Who is affected

---

Building designers, regulators and contractors.