

Proposed Change 2241

Code Reference(s):	NPC25 Div.B 2.2.2.2.(1) (first printing)
Subject:	Plumbing
Title:	Deletion of a Withdrawn CSA Standard and Introduction of Requirements for Additional Plumbing Fixtures
Description:	This proposed change deletes the withdrawn CAN/CSA-B45 Series, "Plumbing Fixtures," from the NPC and introduces references to CSA B45.8:23/IAPMO Z403-2023, "Terrazzo, concrete, composite stone, and natural stone plumbing fixtures," CSA B45.11:17/IAPMO Z401-2017, "Glass plumbing fixtures," and CSA B45.12:23/IAPMO Z402-2023, "Aluminum and copper plumbing fixtures."
Related Code Change Request(s):	CCR 773, CCR 789, CCR 1055, CCR 1066, CCR 2179

This change could potentially affect the following topic areas:

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| ☐ Division A | ☒ Division B |
| ☐ Division C | ☒ Design and Construction |
| ☐ Building operations | ☒ Housing |
| ☒ Small Buildings | ☒ Large Buildings |
| ☐ Fire Protection | ☐ Occupant safety in use |
| ☐ Accessibility | ☐ Structural Requirements |
| ☐ Building Envelope | ☐ Energy Efficiency |
| ☐ Heating, Ventilating and Air Conditioning | ☒ Plumbing |
| | ☐ Construction and Demolition Sites |

Problem

Currently, Sentence 2.2.2.2.(1) of the National Plumbing Code of Canada (NPC) references CAN/CSA-B45 Series-02, "Plumbing Fixtures," which CSA Group has withdrawn. Continuing to reference the 2002 edition of the series would create an enforcement gap because more recent editions of the standards within this series are available. The NPC should require that designers and contractors demonstrate, and building officials verify, the compliance of plumbing fixtures with more recent material standards.

In addition, since the 2002 edition, the standards within this series have been updated or new standards have been developed to cover additional materials used in plumbing fixtures. As a result, this proposed change updates Article 2.2.2.2. to reflect these developments.

Justification

To ensure that the Code remains aligned with current industry practice, and to facilitate Code enforcement, this proposed change:

- deletes CAN/CSA-B45-02 Series, which also contained CAN/CSA B45.8-02, "Terrazzo Plumbing Fixtures"
- updates to CSA B45.8:23/IAPMO Z403-2023, "Terrazzo, concrete, composite stone, and natural stone plumbing fixtures"
- introduces CSA B45.11:17/IAPMO Z401-2017, "Glass plumbing fixtures," and CSA B45.12:23/IAPMO Z402-2023, "Aluminum and copper plumbing fixtures," to cover additional materials used in plumbing fixtures.

These three standards are widely recognized, are currently used by manufacturers, and provide reliable and verifiable information. By adding references to these standards and deleting the reference to the 2002 edition, this proposed change ensures that performance data for plumbing fixtures made of concrete, composite stone, natural stone, glass, aluminum and copper can be consistently verified, which would avoid creating confusion for designers, contractors, manufacturers and building officials.

PROPOSED CHANGE

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[2.2.2.2.] 2.2.2.2. Conformance to Standards

- [1] 1)** Except as provided in Article 2.2.2.3.,
- [a] a) ~~plumbing fixtures shall conform to CAN/CSA-B45 Series, "Plumbing Fixtures",~~
 - [b] b) vitreous china *plumbing fixtures* shall conform to ASME A112.19.2/CSA B45.1, "Ceramic Plumbing Fixtures",
 - [c] c) enamelled cast-iron *plumbing fixtures* shall conform to ASME A112.19.1/CSA B45.2, "Enamelled cast iron and enamelled steel plumbing fixtures",
 - [d] d) porcelain-enamelled steel *plumbing fixtures* shall conform to ASME A112.19.1/CSA B45.2, "Enamelled cast iron and enamelled steel plumbing fixtures",
 - [e] e) stainless steel *plumbing fixtures* shall conform to ASME A112.19.3/CSA B45.4, "Stainless steel plumbing fixtures",
 - [f] f) plastic *plumbing fixtures* shall conform to CSA B45.5/IAPMO Z124,

- "Plastic plumbing fixtures",
- [g] --) terrazzo, concrete, composite stone and natural stone plumbing fixtures shall conform to CSA B45.8:23/IAPMO Z403-2023, "Terrazzo, concrete, composite stone, and natural stone plumbing fixtures",
 - [h] h) *macerating toilet systems* shall conform to ASME A112.3.4/CSA B45.9, "Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures", ~~and~~
 - [i] g) hydromassage bathtubs shall conform to ASME A112.19.7/CSA B45.10, "Hydromassage bathtub systems",
 - [j] --) glass plumbing fixtures shall conform to CSA B45.11:17/IAPMO Z401-2017, "Glass plumbing fixtures",
 - [k] --) aluminum and copper plumbing fixtures shall conform to CSA B45.12:23/IAPMO Z402-2023, "Aluminum and copper plumbing fixtures", and
 - [l] i) personal hygiene devices for water closets shall conform to ASME A112.4.2/CSA B45.16, "Personal hygiene devices for water closets".

Impact analysis

This proposed change has minimal cost implications for the industry and regulators. Manufacturers already adhere to these standards, which are internationally recognized and widely applied in the North American market.

Overall, this proposed change modernizes the NPC with little to no cost impact on stakeholders.

Enforcement implications

Building officials would be able to verify that plumbing fixtures comply with active standards referenced in the NPC, which would avoid referring to a withdrawn CSA standard and improve consistency in enforcement.

Who is affected

Designers and specification writers would reference updated and available standards when selecting and documenting plumbing fixtures.

Contractors and installers would be assured that specified products conform to current standards and are readily available in the market.

Manufacturers and suppliers already use the proposed standards, so no additional burden is expected.

Building officials would be able to refer to clear, enforceable standards when verifying the performance and Code compliance of plumbing fixtures. This would also improve consistency in compliance verification and avoid disputes related to unavailable or obsolete standards.

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

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[2.2.2.2.] 2.2.2.2. ([1] 1) [F80-OH2.1,OH2.4]

[2.2.2.2.] 2.2.2.2. ([1] 1) [F80-OS3.1,OS3.2]