



Joint Committee on Plastics and Recreational Vehicle Plumbing Components

5/20/24

Proposed revision to NSF/ANSI 24 - *Plumbing System Components for Recreational Vehicles* (24i12r1)

Revision 1 of NSF/ANSI 24, issue 12 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by June 10, 2024** via the [NSF Online Workspace](#).

Please review all ballot materials. When adding comments, please include the section number applicable to your comment and add all comments under one comment number whenever possible. If you need additional space, please use the attached blank comment template in the reference documents and upload online via the browse function.

Purpose

The proposed revisions in this clean-up ballot:

- Update normative references in Section 2 and as referenced in Sections 5.3.1 and 19.3.1
- Revise normative references boilerplate language in Section 2
- Make minor grammar updates to Section 12.3.8
- Correct a typo in the Section 22 heading
- Add an equivalency note to Table 22.1

If you have any questions about the technical content of the ballot, you may contact me in care of:

A handwritten signature in black ink, appearing to read "Kevin Kalakay", written in a cursive style.

Kevin Kalakay
Chair, Joint Committee on Plastics and Recreational Vehicle Plumbing Components
c/o Monica Milla
Joint Committee Secretariat
Tel: (734) 214-6223
E-mail: mmilla@nsf.org

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by **grey highlighting**. Rationale Statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard for Plastics and RV Plumbing Components –

Plumbing System Components for Recreational Vehicles

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2 Normative references and tools

The following reference documents contain requirements that, by reference in this text, constitute requirements of this NSF/ANSI standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision, and it is the responsibility of the user of this specification to determine the applicability of the most recent editions of these documents and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

21 C.F.R., § Parts 170-199, Food and Drugs

~~ANSI/ASSE 1001-2017~~ **2021**, Performance Requirements for Atmospheric Type Vacuum Breakers

~~ANSI/ASSE 1002-2015~~ **2020/ASME A112.1002-2020/CSA B125.12:20**, Anti-Siphon Fill Valves for Water Closet Tanks

~~ANSI/ASSE 1051-2009~~ **2021**, Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems

ASME A112.18.2-2020/CSA B125.2-2015, Plumbing Waste Fittings

ASME A112.18.3-2008 2002 (R2022), Performance Requirements for Backflow Devices and Systems in Plumbing Fixture Fittings

ASME A112.19.2-2018/CSA B45.1-2019 **18**, Ceramic Plumbing Fixtures

ASME A112.19.3-2022/CSA B45.4-2017:22, Stainless Steel Plumbing Fixtures

ASME BPVC 2019 2023, Boiler and Pressure Vessel Code

ASTM D543-2014 **21**, Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents

~~ASTM D1384-05 (2012)~~ **24**, Standard Test Method for Corrosion Test for Engine Coolants in Glassware

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ASTM D2444-2017 21, Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)

ASTM E202-2018, Standard Test Methods for Analysis of Ethylene Glycols and Propylene Glycols

CSA B45.5-22/IAPMO Z124-201722, Plastic Plumbing Fixtures

~~IAPMO PS 033-2011, Flexible PVC Hose for Pools, Hot Tubs, Spas, and Jetted Bathtubs~~

IAPMO TS 1-2011e1, Mechanical Seal Toilets With or Without Integral Wastewater Tank for Use in Recreational Vehicles

IAPMO TS 12-97e1 (R2020), Self-Contained, Electrically Operated Recirculating, Chemically Controlled Toilet

IAPMO Z1033-2015 (R2020), Flexible PVC Hose and Tubing for Pools, Hot Tubs, Spas, and Jetted Bathtubs

IEEE/ASTM SI 10-2016, American National Standard for Metric Practice

NFPA 1192-2021 NFPA (FIRE)-119.2-2018, Standard on Recreational Vehicles

NSF/ANSI 14, Plastics Piping System Components and Related Materials

NSF/ANSI/CAN 61, Drinking Water System Components – Health Effects

Rationale: Updates boilerplate language in introductory paragraph for consistency with other standards; updates normative references.

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12.3.8 An overflow in the toilet shall be optional when the toilet is equipped with an inlet opening at least nominal 2 in (12.7 mm) in diameter. The overflow line shall be at least a nominal 2 in diameter or less, if the diameter will take the full discharge of the supply valve, and form a trap with a seal at least 2 in (50.8 mm) deep, and be accessible for cleaning. The trap may have a drain fitting. The overflow outlet shall discharge beneath the mechanical seal. A portion of the water in the overflow trap shall be replaced with fresh water at each flushing.

Rationale: Makes minor grammar updates.

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5 Design and construction

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5.3 Backflow and back siphonage

5.3.1 If a backflow protection device is required, it shall conform to the applicable requirements under ASME A112.18.3M.

Rationale: Updates to current ASME standard version/name.

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19 Flexible drain system

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19.3 Performance

19.3.1 System components shall comply with Sections 22.2 and 22.6 of this Standard as well as IAPMO PS-033 Z1033, Section 35 (Testing Requirements).

Rationale: Updates to current IAPMO standard name and section.

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22 Flexible vent systems, pipe, and fittings

Rationale: Corrects typo.

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22.6 Chemical resistance

Pipe and fittings shall not increase in weight more than 0.5% when tested according to ASTM D543 using the chemicals in Table 22.1.

Table 22.1
Chemical resistance testing

Chemicals	Concentration in water solution
sodium chloride	5%
acetic acid	5%
Ivory soap ^a	5%
household detergent	5%
^a Or equivalent.	

Rationale: Creates consistency with how brands are handled across other standards.