



The IAPMO ANSI-Accredited Development Process

W. <https://www.iapmo.org/codes-standards-development/code-development>

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Codes Development

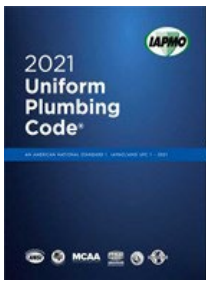
<https://www.iapmo.org/codes-standards-development/code-development>

Learn more

<https://www.uniformcodes.org/>

Scope

- **UPC:** Includes all potable water, building supply, and distribution pipes; all plumbing fixtures and traps; all drainage and vent pipes; and all building drains, and building sewers, including their respective joints and connections, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, liquid and fuel gas piping, and water heaters and vents for same.
 - 2021 edition, public access: <https://epubs.iapmo.org/2021/UPC/>
- **UMC:** The design, construction, installation, quality of materials, location, operation, and maintenance or use of heating, ventilating, cooling, and refrigeration systems; heat-producing appliances, fuel-gas piping systems, and fuel gas appliances to maintain the desired environmental conditions in a space.
 - 2021 edition, public access : <https://epubs.iapmo.org/2021/UMC/>
- **USHGC:** The provisions of this code shall apply to the erection, installation, alteration, addition, repair, relocation, replacement, addition to, use or maintenance of solar energy, water heating, appliances intended for space heating or cooling, swimming pool heating, process heating, geothermal and hydronic systems, snow and ice melt systems and use of any solar energy systems.
 - 2021 edition, public access: <https://epubs.iapmo.org/2021/USHGC/>
- **USPSHTC:** Includes minimum standards for the design, construction or installation, repair or alterations of swimming pools, spas, and hot tubs, public or private, facilities and decks, piping systems, water quality, chlorinators, heating equipment, fuel gas piping, safety provisions and equipment related thereto.
 - 2021 edition, public access: <https://epubs.iapmo.org/2021/USPSHTC/>
- **WE-Stand (Water Efficiency and Sanitation Standard):** Includes methods for conserving potable and nonpotable water used and around buildings. Such conservation methods include: pipe sizing, flow restrictors for food waste devices, HVAC water efficiency, landscape irrigation system design and installation, leak detection and control, onsite treatment systems for nonpotable reuse, rainwater catchment, reuse of alternate water sources (recycled) water and gray water, water recycling units for medical and laboratory facilities.
 - 2020 edition, public access: <https://epubs.iapmo.org/2020/WEStand/>



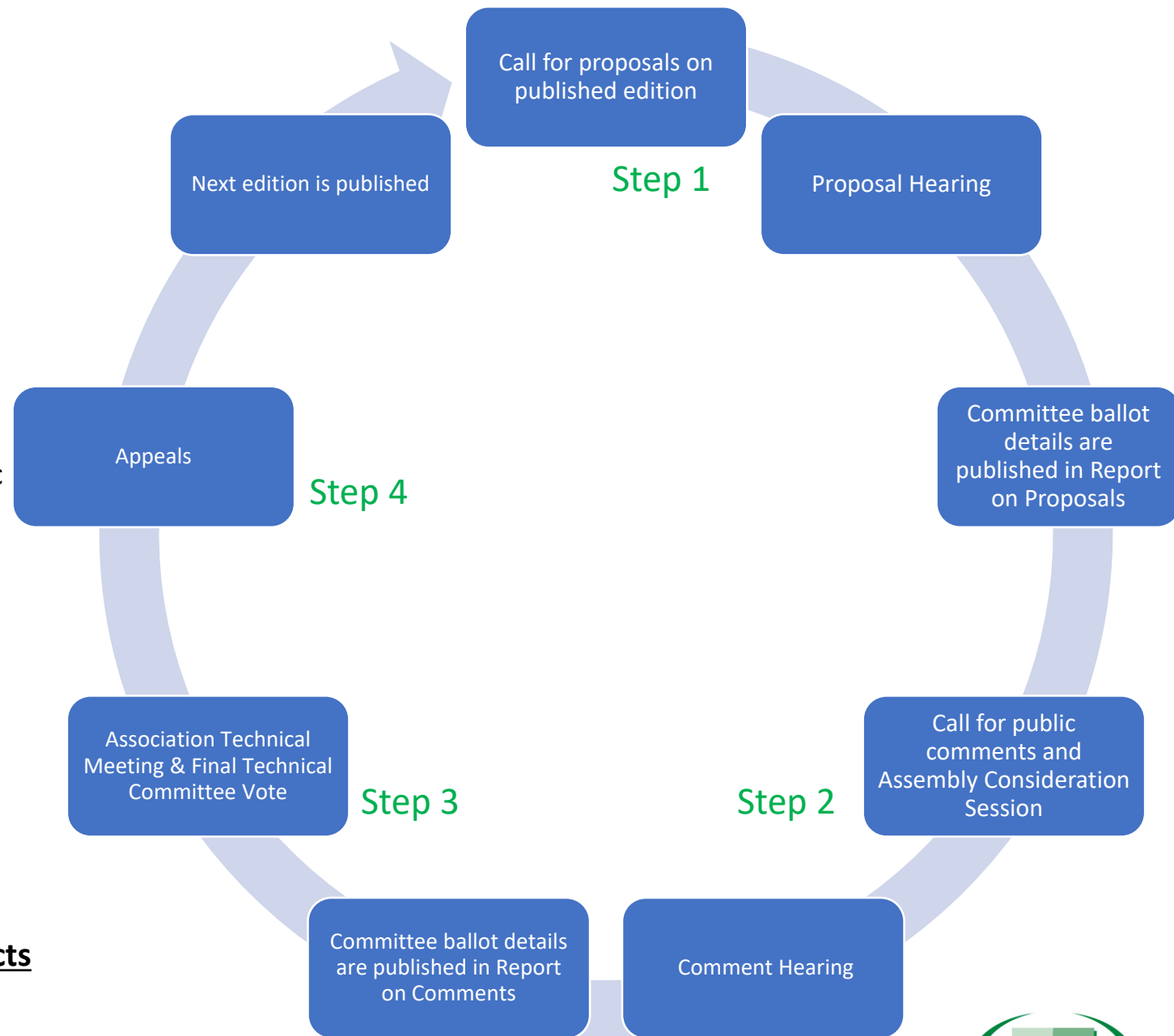
➤ UPC and UMC Development Process (Four Step Process).

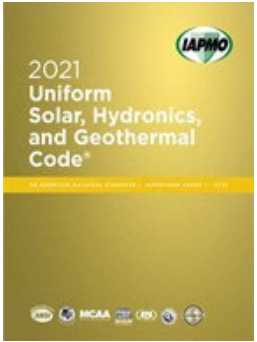
The entire process takes 3 years to complete

- **Step 1:** Proposal Stage (first year)
- **Step 2:** Comment Stage (second year). At the Assembly Consideration Session, IAPMO membership may submit public comments for the Technical Committee consideration.
- **Step 3:** Association Meeting (second year year) followed by a final Technical Committee vote. At the Association Technical meeting, IAPMO membership votes to adopt the Report on Proposal (ROP) and Report on comments (ROC). Any approved amendments to the ROP and ROC by IAPMO membership are forwarded to the Technical Committee for a final vote.
- **Step 4:** Appeals Stage and Publication (third year)

➤ Follows a published timeline

➤ The Technical Committee (Balanced Body) reviews and acts on all proposed code changes from beginning to end.





➤ **The USHGC, USPSHTC and WE-Stand Development Process (Three Step Process). The entire process takes 3 years to complete**

- Step 1: Proposal Stage (first year)
- Step 2: Comment Stage (second year)
- Step 3: Appeals Stage and Publication (third year)

➤ **Follows a published timeline**

➤ **The Technical Committee (Balanced Body) reviews and acts on all proposed code changes from beginning to end.**



Standards Development

(<https://www.iapmo.org/standards-development>)

- Maintained in a periodic cycle
- ANSI and SCC accredited
- [Open Projects](#)
- [ANSI Development Process](#)
- [SCC Development Process](#)

Code. A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

Standard. A document, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and which is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions shall be located in an appendix, footnote, or fine print note and are not to be considered a part of the requirements of a standard.

Getting Involve

- **UMC/UMC**

- ✓ Applications can be obtained at:

- https://forms.iapmo.org/iapmo/committee/app_tech_committee.aspx

- **USPSHTC/USHGC/WE-STAND**

- ✓ Applications can be obtained at:

- https://forms.iapmo.org/iapmo/committee/app_tech_committee.aspx

- **Plumbing/Building Standards Committee**

- ✓ Applications can be submitted at any time at:

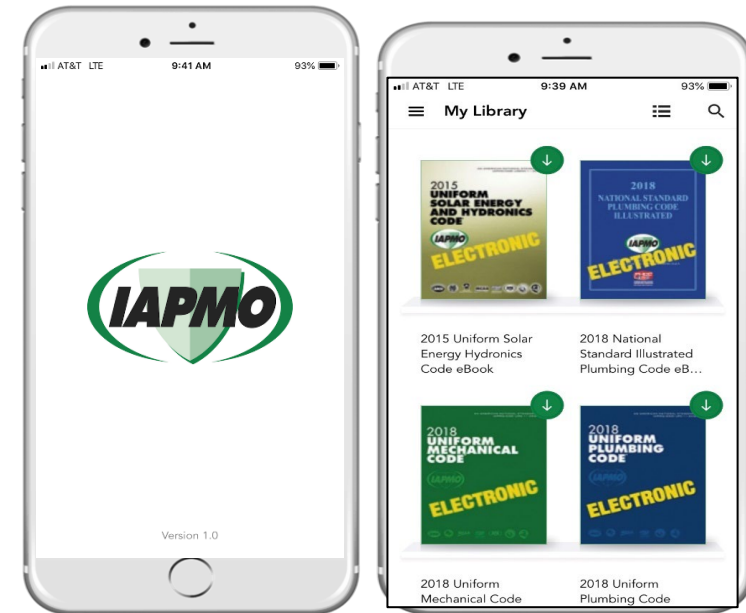
- https://forms.iapmo.org/iapmo/committee/app_ps_committee.aspx

IAPMO Codes Mobile App

- Available for iPhone and Android devices
- Login with your IAPMO membership or store account
- View your purchased electronic copies of 2015/2018 UMC, UPC, USPSHTC and USHGC, and 2018 NSPC.
- Read code and make annotations while in offline mode
- Obtain Technical Staff contact information for code questions.

Membership not required.

- View our current code development cycle
- Submit formal and informal code interpretation request
- Receive important notifications
- Access to code errata
- Lots more!



What Makes IAPMO Different?

The Codes Development Process

- **Accredited by ANSI.** IAPMO Codes are developed in accordance with an ANSI accredited development process.

Ensures balance, lack of dominance and right to appeal which are essential for a consensus document.

- **Third-Party Audit.** IAPMO Codes are subject to an ANSI audit every 5 five years. **Audit by a third-party entity assure the procedures have been followed and protects the integrity of the process.**
- **Third-Party Appeals Process.** The public can appeal the IAPMO process to a third-party (ANSI). **The ANSI Essential Requirements allows anyone to appeal a third-party entity ANSI.**
- **Balance.** IAPMO's consensus body is a Technical Committee where no single interest category exceeds more than 1/3 of the Committee. This balanced body approves changes to the codes. **The IAPMO Codes development process is approved by a balanced committee throughout the process (proposal and comment stage).**
- **Technical Committee.** The Technical Committee addresses public proposals and public comments. This allows for the same committee to oversee all changes from beginning to end. **This allows a group of experts to thoroughly evaluate a proposal from the start to the end of the process.**
- **Procedures.** IAPMO's Regulations comply with the ANSI Essential Requirements. **The IAPMO Codes development process must comply with the ANSI Essential Requirements.**

What Makes the IAPMO Codes and Standards?

- **Project Initiation Notification (PINS):** At the initiation of a project to develop or revise an American National Standard, notification shall be transmitted to ANSI using the Project Initiation Notification System (PINS) form, or its equivalent, for announcement in Standards Action. Comments received in connection with a PINS announcement shall be handled in accordance with ANSI procedures. **The ANSI essential requirements allows anyone to be added to a notification system to be aware of not only the IAPMO Codes and Standards, but other ANSI accredited codes and standards as well. From this notification system, you can be made aware of any new standards being developed and request to be added as an interested party.**
- **Assertions of conflict or duplication:** If a developer receives written comments within 30 days from the publication date of a PINS announcement in Standards Action, and said comments assert that a proposed standard duplicates or conflicts with an existing American National Standards (ANS) or a candidate ANS that has been announced previously (or concurrently) in Standards Action, a mandatory deliberation of representatives from the relevant stakeholder groups shall be held within 90 days from the comment deadline. **Allowing for any conflict or duplications complaints to be raised is an important aspect in a consensus document. This avoids repeated standards to be generated which causes confusion in the industry and a disservice to the industry.**
- **Public Review:** In addition, proposals for new American National Standards and proposals to revise, reaffirm, or withdraw approval of existing American National Standards shall be transmitted to ANSI using the BSR-8 form, or its equivalent, for listing in Standards Action in order to provide an opportunity for public comment. **The ANSI essential requirements allows anyone to be added to a notification system to be aware of not only the IAPMO Codes and Standards, but other ANSI accredited codes and standards as well. From this notification system, you can be made aware of any revisions to ANSI standards to request copies, submit comments, or be engaged.**
- **ANSI Approval:** A standard developed by an ANSI-Accredited Standards Developer may be approved as an American National Standard by the ANSI Board of Standards Review (BSR) or by an ANSI Audited Designator. In either case, the essential due process and consensus criteria defined herein shall apply. In addition, approval assures the user that each American National Standard is generally acceptable to those that participated in the development of consensus for the standard. **ANSI accredited documents requires approval from a third-party entity (ANSI) prior to publishing.**
- **Appeals:** Written procedures of an ANSI-Accredited Standards Developer (ASD) shall contain an identifiable, realistic, and readily available appeals mechanism for the impartial handling of procedural appeals regarding any action or inaction. Procedural appeals include whether a technical issue was afforded due process.
- **Audited Designator Status.** IAPMO is one of only six organization worldwide to be granted Audited Designator status by ANSI. ANSI's thorough investigation into The IAPMO's accredited procedures determined that IAPMO has achieved a consistent record of successful voluntary standards development and that IAPMO's code development process contained the integrity required to achieve this designation.

ANSI

Essential Requirements

➤ **Due Process:** Due process means that any party with a direct and material interest has a right to participate by:

- a) expressing a position and its basis,
- b) having that position considered, and
- c) **having the right to appeal.**

Due process allows for equity and fair play. The following are examples of what constitute the minimum acceptable due process requirements for the development of consensus. Go to <https://www.ansi.org/american-national-standards/ans-introduction/essential-requirements> for complete list.

- **Openness:** Participation shall be open to all parties who are directly and materially interested in the activity in question. There shall be no undue financial barriers to participation. Voting membership on the consensus body shall not be conditional upon membership in any organization, nor unreasonably restricted on the basis of technical qualifications or other such requirements.
- **Lack of Dominance:** The standards development process shall not be dominated by any single interest category, individual or organization. Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.
- **Balance:** The standards development process should have a balance of interests. Participants from diverse interest categories shall be sought with the objective of achieving balance. If a consensus body lacks balance in accordance with the historical criteria for balance, and no specific alternative formulation of balance was approved by the ANSI Executive Standards Council, outreach to achieve balance shall be undertaken.
- **Consensus Vote:** Evidence of consensus in accordance with these requirements and the accredited procedures of the standards developer shall be documented.
- **Consideration of Views and Objections:** Prompt consideration shall be given to the written views and objections of all participants, including those commenting on the PINS announcement or public comment listing in Standards Action.
- **Appeals:** Written procedures of an ANSI-Accredited Standards Developer (ASD) shall contain an identifiable, realistic, and readily available appeals mechanism for the impartial handling of procedural appeals regarding any action or inaction. Procedural appeals include whether a technical issue was afforded due process.

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