

## SUSTAINABILITY

- Involvement in sustainable initiatives predates the current trends, as the Uniform Codes have long included provisions for water-efficient plumbing products, grey water and reclaimed water systems, solar energy systems, and environmentally friendly refrigerants.
- The latest edition of the UPC permits the use of higher efficiency plumbing fixtures and fittings, such as dual flush and 1.28 gallon per flush toilets, urinals that flush at 1/2 gallon or less, and faucets and showerheads that use up to 30 percent less water than required by federal law.
- The UPC also allows for grey water to be used for irrigation purposes and reclaimed water for flushing water closets and urinals and supplying trap primers.
- The Uniform Mechanical Code permits the use of environmentally friendly refrigerants and relies upon ASHRAE 62.1 for proper indoor air quality requirements.
- The changes in the Uniform Plumbing Code, Uniform Mechanical Code and Uniform Solar Code will focus on achievable goals that reduce waste and conserve precious resources, while still enabling contractors to build affordable buildings with more efficient construction products and practices.

In order to ensure safety and reliability, scientific research is required on a number of issues including:

- Drain line carry capabilities of High Efficiency Toilets
- Gray water and rain water reuse systems
- Non-water consuming urinals; installation and cost benefit studies
- Efficient plumbing system design
- IAPMO is brokering an agreement with other industry associations in order to obtain cooperation, bring the best stakeholder talent together and align efforts to get the needed research done effectively and efficiently.

## RESEARCH PROVISIONS

- Provides the most comprehensive information available on plumbing and mechanical provisions that work toward water and energy efficiency
- All provisions contained in the Green Supplement will be proven safe and reliable
- Will provide related installation and maintenance requirements
- Where possible, the Green Supplement will provide commentary detailing the water and energy savings associated with the provisions called out in the Supplement.
- Serve as an invaluable resource for progressive jurisdictions implementing green building and water efficiency programs, and for code officials, plumbers, contractors, engineers and manufacturers in designing, installing and approving green plumbing and mechanical systems.



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Safe and Sustainable

## COMMITMENT

A safe and sustainable environment is everyone's responsibility, but only one organization blends the experienced leadership and broad resources necessary to produce a consensus document to orchestrate our entire industry's efforts to go "green." With more than 80 years in focused code development and model codes that protect half the world's population, IAPMO is the natural choice in developing such a document that will equip our industry with the tools to build a better, more sustainable coexistence with the planet.

- Long time leader in sustainable model code provisions
- Since the early 1990's, the *Uniform Plumbing Code* (UPC) has mandated water efficient plumbing fixtures and fittings.
- IAPMO developed the *Uniform Solar Energy Code* in 1976.
- IAPMO is the first model code agency to partner with the US EPA's WaterSense program which is providing consumers with a simple way to make product choices that use less water, with no sacrifice to quality or product performance.
- Initial commitment is the pushing forward of a ten percent mandatory reduction in energy usage and water savings through code changes that require sustainable construction practices over the next three years.



## LEADERSHIP

- IAPMO's leadership in sustainable initiatives predates the current trends among other organizations. The Uniform Codes have long included provisions such as water-efficient plumbing products, grey water and reclaimed water systems, solar energy systems, and environmentally friendly refrigerants.
- During this dramatic transition to increasingly sustainable construction practices, IAPMO remains dedicated to ensuring we are the leader in sustainable model construction and maintenance codes that are safe and reliable.
- The IAPMO Board of Directors has also established the Committee for Awareness and Understanding of a Sustainable Environment (CAUSE) and Green Technical Committee (GTC) to identify opportunities to make the Uniform Codes more sustainable and achieve our sustainability goals.
- The IAPMO CAUSE Committee is composed of the leading figures in the plumbing and mechanical industries and has taken immediate steps such as calling for a minimum 10 percent reduction in energy and water consumption in the Uniform Codes. The CAUSE group will be directing the environmental activities of IAPMO.



- The GTC is comprised of a diverse group of experts in Green plumbing and mechanical fields. The committee is comprised of water and energy conservation authorities, plumbers, contractors, engineers, and code inspectors.
- The GTC objectives include identifying opportunities to make the Uniform Codes more sustainable, and to develop a Green Plumbing and Mechanical Supplement.



## GREEN TECHNICAL COMMITTEE

- The Green Supplement will be a separate document from the Uniform Plumbing and Mechanical Codes and will establish requirements for green building and water efficiency applicable to plumbing, mechanical, and solar energy (both thermal and photovoltaic) systems.
- The Green Supplement will provide the most comprehensive collection of plumbing and mechanical provisions available toward increased water and energy efficiency
- The Green Supplement will serve as an adjunct to the Uniform Codes or ANY of the plumbing and mechanical codes used in the US.
- The supplement will not be a "greener" version of the Uniform Codes, but rather, the Green Supplement will:
  - ❖ Serve as a repository for provisions that ultimately will be integrated into the Uniform Codes. The Green Supplement is a logical transitional home for green requirements until they are fully accepted by industry and are ready to be included into the code.
  - ❖ Serve as a resource for progressive jurisdictions that are implementing green building and water efficiency programs.



- ❖ Enforcement aid for existing green ordinances
- ❖ Model for jurisdictions implementing green ordinances.
- ❖ Serve as a resource for inspectors, plumbers, contractors, engineers and manufacturers in designing, installing and approving green plumbing and mechanical systems.
- ❖ Be written in voluntary language and in a format similar to the Uniform Codes.
- ❖ Maintain IAPMO philosophy of a focused industries specific document to minimize the need for additional codes and standards.
- ❖ Coordinate and resolve conflicts among other green building and water efficiency program requirements.
- The target date of completion for the Green Plumbing and Mechanical Supplement is February 2010.

## GREEN PLUMBING & MECHANICAL CODE SUPPLEMENT