

DAVE VIOLA DIRECTOR OF SPECIAL

**SERVICES** 

# GTC Puts Finishing Touches on Green Code Supplement

n Dec. 8-9, 2011, the IAPMO Green Technical Committee (GTC) completed its work on the second edition of the *Green Plumbing and Mechanical Code Supplement*. This was no small feat when considering the number and the depth of the comments that were received during the supplement's public comment period. Yet, once again the GTC came through with flying colors, ensuring that the supplement remains the most comprehensive green construction code in the country for plumbing and mechanical applications.

Among the new or revised provisions that will be contained in the second edition of the supplement are the following:

# PLUMBING DESIGN, FIXTURES AND FIXTURE FITTINGS

- Reduces the maximum flush volume for non-residential from 1.6 gpf to 1.28 gpf. The only remaining caveat is that 1.6 gpm toilets are still permitted where installed in remote locations without the benefit of supplemental drain flows to assist drainline carry.
- Reduces the maximum flow rate for kitchen faucets from 2.2 gpm to 1.8 gpm and for pre-rinse spray valves from 1.6 gpm to 1.3 gpm
- New provisions for dipper well faucets to address unnecessary water waste resulting from the continuous flow of water at high rates
- Adds provisions for rehabilitating piping systems with epoxy lining systems
- Maximum consumption limits set for trap primers and requires the use of alternate water source to prime traps where available
- Simplifies maximum hot water volume calculations
- Limits the use of hot water recirculation pumps to a building's hours of operation to prevent energy waste

#### **ALTERNATE WATER SOURCE SYSTEMS**

- Minimum water quality standards added for nonpotable and potable rainwater catchment systems
- Incorporates new standards for water reuse treatment technologies to ensure that systems properly treat water to safe quality levels
- Expands and clarifies provisions allowing gray water, black water, rainwater, storm water, dry weather runoff, swimming pool backwash, condensate, cooling tower blow down, foundation drainage, and commercial kitchen appliance water discharge to be captured, treated and reused for toilet and urinal flushing, irrigation and other approved uses

#### **MECHANICAL AND HVAC DESIGN**

- Now requires duct leakage testing for low pressure systems
- New water efficiency measures for evaporative coolers limiting water consumption to 3.5 gallon maximum per ton of cooling and requiring water consumption markings on the equipment
- Updates HVAC energy efficiency provisions to the 2010 edition of ASHRAE 90.1.
- New provisions intended to prevent HVAC system over-sizing

# ALL NEW REQUIREMENTS FOR LANDSCAPE IRRIGATION SYSTEMS

- Requirement for dedicated water meters on systems servicing 2,500 square feet or more
- Requirements for irrigation controls to respond to climate or soil conditions and to shut off during rain events
- System performance requirements to prevent run off and spraying onto adjacent properties, impervious surfaces and buildings
- System design requirements pertaining to supply line drainage and sprinkler head performance



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And the provisions listed above only scratch the surface. Once again, it was a privilege to be able to work with such an incredibly knowledgeable and diverse group of passionate stakeholders that comprise the GTC. As staff, guests that attend GTC meetings constantly tell interested parties and us how productive and informative these meetings are. Everyone walks away from GTC meetings knowing a good deal more than they did when they walked into the meeting room. I can think of no higher compliment.

In order to further leverage this gathering of industry experts, IAPMO has an additional treat in store for users of the supplement. Several GTC members have agreed to coauthor papers that will be published in the appendix of the second edition. Our esteemed co-authors include:

Phil Campbell (United Association) and Gary Klein (Affiliated International Management, LLC) who will write about "Hot Water Design for Green Buildings"; Rob Zimmerman (Kohler Co.) and John Koeller (Koeller and Associates) will discuss "The Future of Indoor Water Efficiency"; Brent Mecham (Irrigation Association) and Thomas Pape (Best Management Partners) will tackle "Modifying User Behavior on Irrigation System Use" and Bill Hoffman (Hoffman and Associates, LLC) and Tom Meyer (Praxis Green) will address "Water Meets Energy — Synergies and Conflict" (note: titles subject to revision).

These esteemed GTC members will then present their papers at the International Emerging Technology Symposium, which will be coconvened by IAPMO and the World Plumbing Council on May 1-2 in Bethesda, Md. I can think of no better way to continue to grow the influence of the Green Plumbing and Mechanical Supplement than to show off the expertise of our GTC members.

Finally, we would be remiss if we didn't mention Bill Erickson, chair of the GTC. Bill is the glue that makes the GTC work. His fantastic sense of humor combined with a no-nonsense "let's get this done" sensibility is directly related to the success of the supplement. I know I can speak on behalf of the entire GTC and IAPMO staff when I say that we are indebted to Bill for the leadership he has provided.

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## **CODE QUIZ ANSWĒRS**

(Questions located on page 45)

#### **Uniform Plumbing Code**

1. A Sec. 1001.1

Sec 1001.2

Sec. 1001.3

4. **D** Sec. 1001.4

#### **Uniform Mechanical Code**

5. **C** Sec. 1020.0

6. A Sec. 1023.3

Sec. 1005.1

Α Sec. 1004.3



#### MARCH 2012

#### **ACCA Conference & Indoor Air Expo**

Mar. 5-8, 2012 Las Vegas, Nevada https://www.acca.org/education/ conference

#### **Plumbex India**

Mar. 16-18, 2012 Bombay Exhibition Centre, Goregaon (East), Mumbai http://www.plumbexindia.in/index 4.htm/

#### APRIL 2012

#### **ISH China & CIHE**

Apr. 2-4, 2012 New China International Exhibition Center – Beijing, China http://www.messefrankfurt.com.hk/ fair homepage.aspx?fair id=17& exhibition id=18

#### Kitchen & Bath Industry Show (K/BIS)

Apr. 27-29, 2012 McCormick Place - Chicago, Illinois www.kbis.com

#### **MAY 2012**



Emerging Technology Symposium
May 1-2, 2012
Washington, DC - Marriott Bethesda North Hotel

#### **IUNE 2012**

#### **NFPA World Safety Conference**

June 12 - 15, 2012 Boston Convention Center Boston, MA http://www.nfpa.org/categorylistCONF.asp? categoryID=1600

### **ASHRAE Annual Meeting**

June 25 - 29, 2012 Montreal. Ouebec http://ashraem.confex.com/ashraem/s11/ cfp.cgi

#### **SEPTEMBER 2012**



**IAPMO 83rd Annual Education IAPMO**) and Business Conference September 23 - 27, 2012

Hollywood, Florida - Westin Diplomat http://www.iapmo.org/Pages/Meetingsand Conferences.aspx

## **OCTOBER** 2012

2012 ASPE Convention and EPE Show

October 27-31, 2012 Charlotte, North Carolina http://aspe.org/2012Convention

Changes or additions to this calendar may be requested by sending an Email to the editors: geoff.bilau@iapmo.org or jeff.ortiz@iapmo.org