

Late Backup

#51

City of Austin

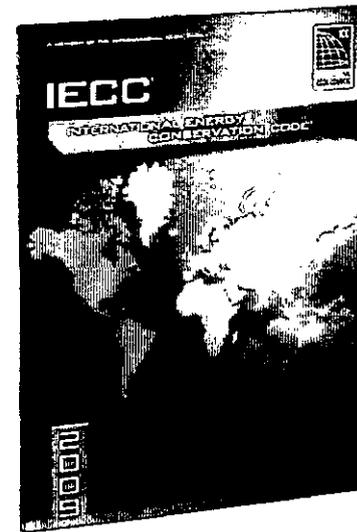
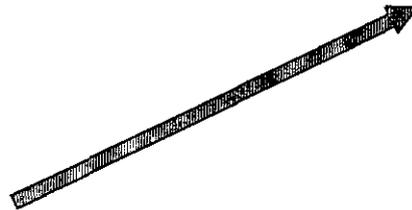
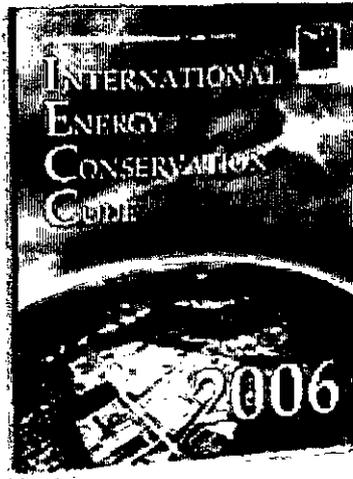
Technical Codes

Proposed Adoptions and Amendments

Presented to City Council

April 8, 2010

2009 International Energy Conservation Code (IECC)



The IECC includes changes that reduce energy use of residential and commercial buildings. These changes are in line with the City of Austin policy relating to the Zero Energy Capable Homes (ZECH) Initiative and the Austin Climate Protection Plan.

IECC – Residential

Highlights of the Draft Ordinance

- **Published 2009 IECC requires duct and envelope testing of homes with no provision for batch testing or sampling.**
 - Occupants are assured all homes meet the code requirements
 - Small-volume builders are not at a disadvantage

- **Amendments follow guidance in the ZECH task force report and Climate Protection Plan**
 - Improvement in window/wall performance
 - Increase in lighting efficacy
 - Insulation of hot water piping to high-use fixtures

- **Anticipated Annual Energy Reduction**
 - 1648 kWh
 - 17% total reduction over the 2006 IECC

IECC – Commercial Highlights of the Draft Ordinance

- **Published IECC improves envelope efficiency**

- **Local amendments include:**
 - Commissioning of HVAC equipment in buildings over 10,000 square feet (*conditioned area only*)
 - Improved air barrier requirements
 - HVAC shut off devices

2009 International Property Maintenance Code (IPMC)

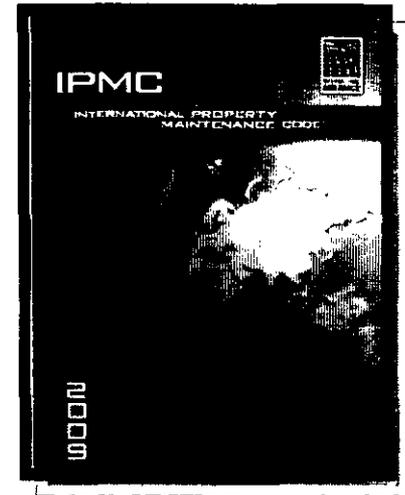
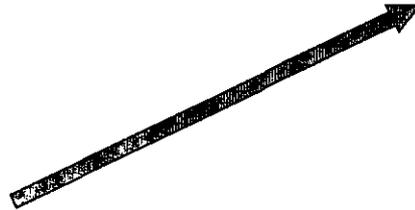


The IPMC provides standards for property maintenance and safety at existing buildings. Requirements in this code cover maintenance of building, mechanical, electrical and plumbing systems as well as the condition and maintenance of the premises.

Presently, two codes provide minimum standards for the maintenance of existing buildings in Austin. They serve as the basis by which City staff address substandard and dangerous conditions at vacant and occupied structures.



Current Codes: 1994 Uniform Housing Code and the 1994 Uniform Code for the Abatement of Dangerous Buildings.

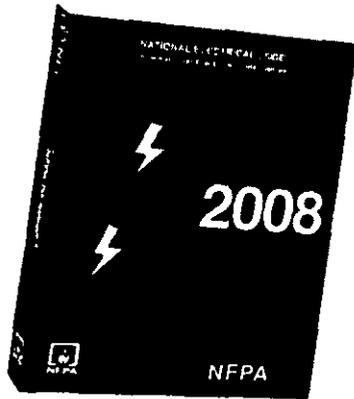


Proposed Code: 2009 International Property Maintenance Code (IPMC)

IPMC - Highlights of the Draft Ordinance

- Scope of the IPMC includes minimum standards for maintenance of Residential/Commercial use structures.
- Requirements for security at dwelling units.
- Smoke alarm requirements amended to parallel City's Fire Code.
- Requirement for employee restroom facilities.

2008 National Electrical Code



The NEC establishes minimum requirements to provide safe electrical construction and operation within both residential and commercial structures for the protection of public health and welfare.

The proposed amendments will establish minimum requirements for:

§ 25-12-266 TIME LIMITATION OF APPLICATION.

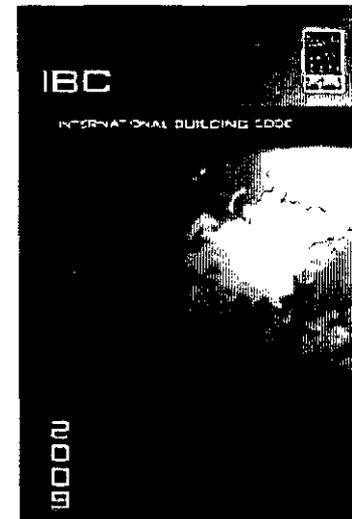
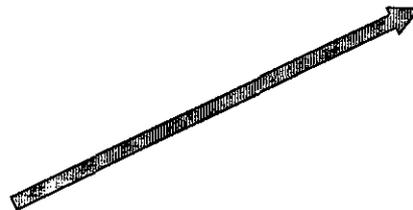
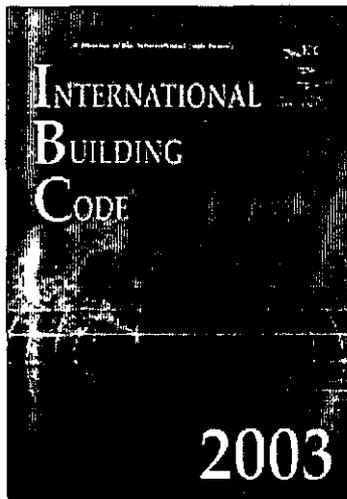
§ 25-12-267 EXPIRATION.

§ 25-12-268 EXTENSION.

§ 25-12-269 REACTIVATION.

§ 25-12-270 REVIEW FEE FOR EXPIRED PERMITS.

2009 International Building Code (IBC)

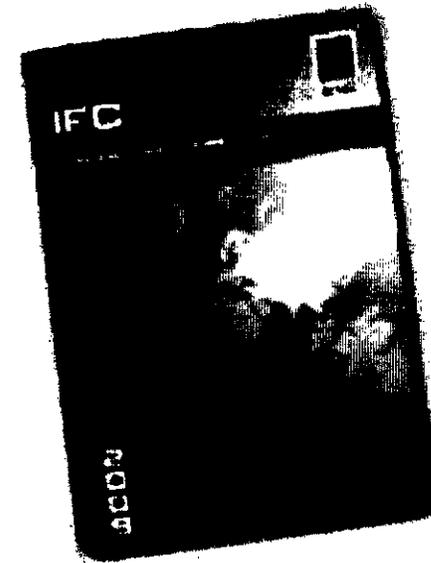
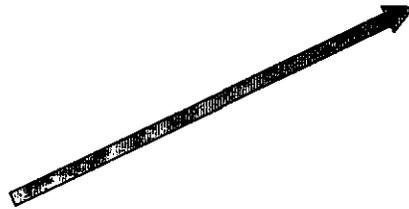
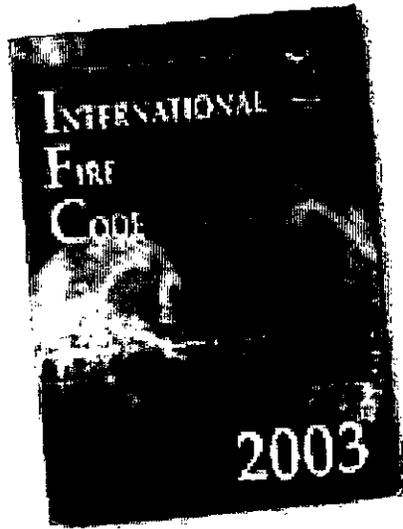


The IBC provides minimum requirements to safeguard the public health, safety and general welfare of the occupants of new and existing buildings and structures.

IBC - Highlights of the Draft Ordinance

- Establishes the time limitation of permit application provisions with the Land Development Code and added language to clarify and to help reduce or eliminate permit application expiration.
- Establishes the permit expiration provisions with the LDC and added language to clarify and to help reduce or eliminate permit expiration.
- Harmonized accessibility requirements with the Texas Accessibility Standards.
- Language to help facilitate egress and emergency response in high hazard occupancies.
- Language to clarify automatic sprinkler system requirements in certain assembly occupancies.

2009 International Fire Code (IFC)



The IFC establishes minimum requirements for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings.

IFC - Significant Changes

- Annual permit requirement for fire protection systems to facilitate tracking and to help ensure adequate maintenance of these systems.
- Radio communications capabilities within new and existing buildings and wired systems in high rise structures.
- Clarification and coordination of requirements with the Building Code for temporary tent and membrane structures.
- Placards and signs to alert firefighters about potentially dangerous conditions including but not limited to unprotected light weight building materials.
- Clarification and coordination of requirements with the Building Code for temporary tent and membrane structures.
- Additional environmental protections for fuel dispensing operations.

2006 International Residential Code (IRC)



The IRC provides minimum requirements to address the design and construction of one and two-family dwellings and townhouses.

The proposed amendments will establish minimum requirements for:

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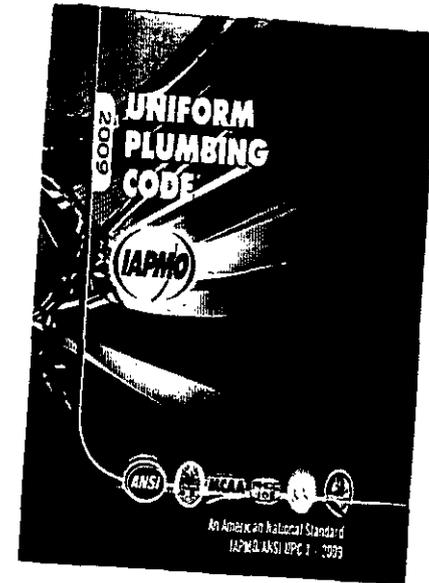
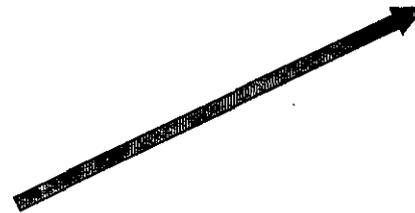
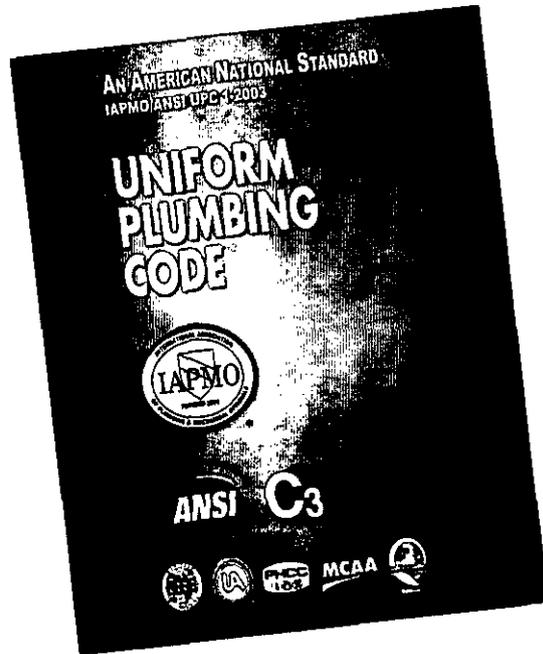
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2009 Uniform Plumbing Code (UPC)



The UPC establishes minimum requirements to provide safe and sanitary plumbing systems for the protection of public health and welfare.

UPC - Significant Changes

- **1.28 Gallon Per Flush Water Closets**
 - Effective May 1, 2010 all water closets shall have an average consumption of 1.28 gallons of water per flush.

- **Commercial Gray Water Systems**
 - Wastewater from bathtubs, showers, bathroom wash basins, clothes washers, laundry tubs and other clear water wastes shall be permitted to supply uses such as water closets, urinals, trap primers for floor drains, floor sinks, irrigation, industrial processes, water features and other uses after a treatment process.

- **Reclaimed and other auxiliary water systems**
 - Reclaimed and other auxiliary water shall be allowed to supply uses such as water closets, urinals, and trap primers for floor drains and floor sinks, irrigation industrial processes, water features and other uses.
 - Auxiliary waters include rain, a well, lake, spring, river, stream, retention or re-irrigation, or used waters, reclaimed water, recycled water, or air conditioning condensate.

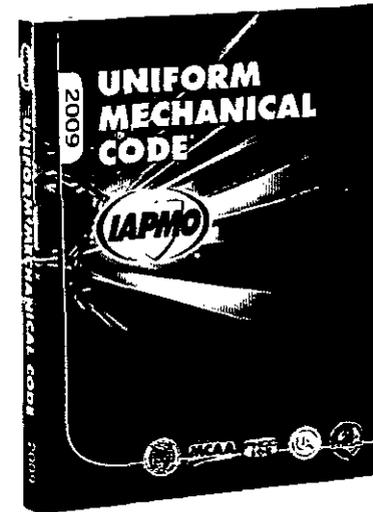
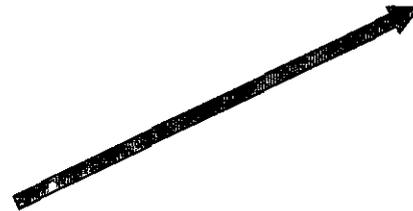
Auxiliary Water Uses (*within structure*)

Uses inside a structure		
Uses	2003 Uniform Plumbing Code (adopted by Council on December 15, 2005)	2009 Uniform Plumbing Code (proposed)
1 Residential Gray Water	1 No allowance	1 Not allowable - Found to be a prohibited use by TAC/TCEQ Chapter 210 rules
2 Commercial Gray Water	2 No language to address use.	2 Proposed ordinance to allow for toilet/urinal flushing if treated to the same standard as Type 1 reclaimed water
3 Residential Reclaimed Water (provided by AWU)	3 No allowance	3 Allowed per code and proposed ordinance for toilet flushing
4 Commercial Reclaimed Water (provided by AWU)	4 Appendix J addresses toilet/urinal flushing	4 Proposed ordinance allows for toilet/urinal flushing and priming of trap seals.
5 Residential Auxiliary Water (rainwater, well, condensate, etc.)	5 No allowance	5 Proposed ordinance allows for flushing toilets with auxiliary water if treated.
6 Commercial Auxiliary Water	6 No language to address use.	6 Proposed ordinance allows for toilet/urinal flushing and trap priming use if treated.
7 Waterless Urinals	7 No allowance	7 Section 402.3.1- allows the installation of listed waterless urinals.
8 Auxiliary Water for Fixtures	8 No language in place for auxiliary water.	8 Allows auxiliary water to be used for non-potable purposes such as toilet and urinal flushing and the priming of traps to maintain the water seal.
9 Trap Seal Protection	9 Potable water used in most cases.	9 Ordinance will require trap primers to utilize wastewater from approved fixtures when structurally feasible.

Auxiliary Water Uses (*outside of the structure*)

Uses outside a structure		
Uses	2003 Uniform Plumbing Code (adopted by Council on December 15, 2005)	2009 Uniform Plumbing Code (proposed)
1 Residential Gray Water	1 Allowed for subsurface irrigation per Appendix G in accordance with State Law	1 Allowed for subsurface irrigation per Chapter 16 Part 1 in accordance with State Law
2 Commercial Gray Water	2 No allowance in adopted code	2 Chapter 16 part II allows for outside irrigation use if water is treated to the same standard as Type I reclaimed water.
3 Residential Reclaimed Water (provided by AWU)	3 No allowance in current code	3 Allowed per code and proposed ordinance for irrigation
4 Commercial Reclaimed Water (provided by AWU)	4 Outside use not addressed.	4 Allows for outside irrigation and other approved uses
5 Residential Auxiliary Water (rainwater, well, condensate, etc.)	5 No language to address use	5 Allowed for irrigation per proposed ordinance
6 Commercial Auxiliary Water	6 No language to address use.	6 Proposed Ordinance allows and sets rules for storage, material requirements and uses.

2009 Uniform Mechanical Code (UMC)



The UMC establishes minimum requirements to provide safe and efficient heating, ventilating, cooling and refrigeration systems.

UMC - Significant Changes

- **Equipment Access**

- New Language was added to allow a dropped grid ceiling system to be considered adequate access to equipment and does not require the use of access panels.

- **Environmental Air Duct Termination**

- Environmental air ducts may terminate over private use balconies if the balconies are serving the same space as the duct and required clearances from openings into the building are maintained.