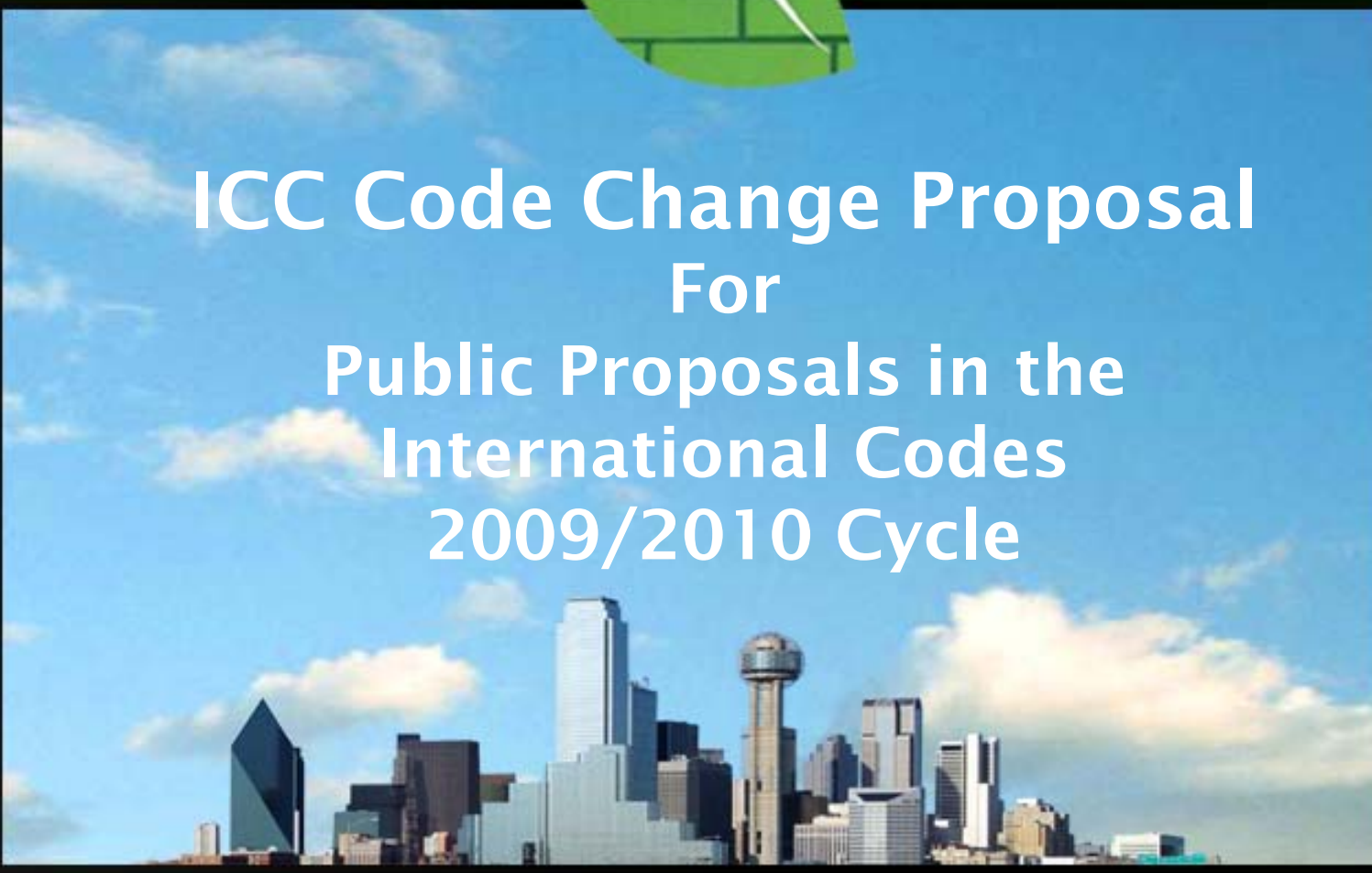
A green leaf graphic with a white vein, positioned at the top center of the slide, partially overlapping the main image frame.

# ICC Code Change Proposal For Public Proposals in the International Codes 2009/2010 Cycle



City of Dallas  
BUILDING INSPECTION DEPARTMENT

# *Summary*

In consultation and collaboration with the **USGBC Codes Committee**, the City of Dallas sought to reframe health, safety and general welfare through a lens of sustainability



## What Framework Do the Codes Provide?

### International Building Code (USA) 2006 edition

101.3 Intent. *The purpose of this code is to establish the minimum requirements to **safeguard the public health, safety and general welfare** through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property **from fire and other hazards attributed to the built environment** and to provide safety to fire fighters and emergency responders during emergency operations*



## *Not Just One Code*

### **Code**

- **IBC** - International Building Code
- **IEBC** - International Existing Building Code
- **IFC** - International Fire Code
- **IFGC** - International Fuel Gas Code
- **IPC** - International Plumbing Code
- **IPSDC** - International Private Sewage Disposal Code
- **IPMC** - International Property Maintenance Code
- **IWUIC** - International Wildland-Urban Interface Code
- **IZC** - International Zoning Code
- **IECC** - International Energy Conservation Code
- **IMC** - International Mechanical Code
- **IRC** - International Residential Code
  
- **All I-Codes except the ICC PC - ICC Performance Code**



# Integrating Sustainability

## Part 1: International Building Code

Section 101.3. Revise as follows:

**101.3 Intent.** The purpose of this code is to establish the minimum requirements for the built environment to safeguard the public health, safety and general welfare through provisions that address:

1. Structural strength, means of egress facilities, stability, durability, sanitation, adequate light and ventilation, energy conservation and accessibility;
2. Safety to life and property from fire and other hazards attributed to the built environment; ~~and to provide~~
3. Safety ~~to~~ of fire fighters and emergency responders during emergency operations; and
4. Sustainable practices in building design, construction and use.



# *Rationalizing Sustainability and the Codes*

## Rationale:

- INTEGRATING PUBLIC HEALTH, SAFETY AND WELFARE AND THE ENVIRONMENT
- NOT REPLACING EXISTING PROVISIONS OR COMPROMISING SAFETY
- STATEMENTS ON SUSTAINABILITY
- SOCIAL VALUE / PUBLIC GOOD
- BUILDING IMPACTS - LOCAL
- BUILDING IMPACTS - GLOBAL
- INDUSTRY ADVANCING
- NOT GREEN BUILDING CODE
- NOT DEFINING SUSTAINABILITY
- NOT TOO EARLY



## *At What Cost?*

### **Cost Impact:**

**This proposal will not increase the cost of construction.**

Subsequent proposals by others addressing sustainable practices may increase initial construction costs, however, a growing body of evidence indicates that more sustainable design and building practices often have no cost implications and sometimes reduce construction costs, while typically reducing operating costs and other negative impacts, improving the long-term affordability of ownership and operation.

Can we afford not to open the door for smarter codes that steer us from future harm?



## *What's Next?*

- **ICC code change hearings in October/November, Baltimore, MD**





**PUBLIC CODE CHANGE PROPOSAL FORM  
FOR PUBLIC PROPOSALS IN THE INTERNATIONAL CODES**

**2009/2010 CODE DEVELOPMENT CYCLE**

**CLOSING DATE: All Proposals Must Be Received by June 1, 2009**

The 2009/2010 Code Development Hearings are tentatively scheduled for October 24-November 11, 2009, Baltimore, MD.

1)

|                                                                                                             |             |                           |                        |
|-------------------------------------------------------------------------------------------------------------|-------------|---------------------------|------------------------|
| <b>Name: Zaida Basora, AIA, Building Official</b>                                                           |             | <b>Date: June 1, 2009</b> |                        |
| <b>Jurisdiction/Company: City of Dallas, TX</b>                                                             |             |                           |                        |
| <b>Submitted on Behalf of: City of Dallas, TX</b>                                                           |             |                           |                        |
| <b>Address: 320 E. Jefferson Blvd., Room 204</b>                                                            |             |                           |                        |
| <b>City: Dallas</b>                                                                                         |             | <b>State: TX</b>          | <b>Zip Code: 75203</b> |
| <b>Phone: 214-948-4364</b>                                                                                  | <b>Ext.</b> | <b>Fax: 214-948-4348</b>  |                        |
| <b>E-mail address: <a href="mailto:zaida.basora@dallascityhall.com">zaida.basora@dallascityhall.com</a></b> |             |                           |                        |

2)

**Copyright Release: In accordance with Council Policy #28 Code Development, all Code Change Proposals, Floor Modifications and Public Comments are required to include a copyright release. A copy of the copyright release form is included at the end of this form. Please follow the directions on the form. This form as well as an alternative release form can also be downloaded from the ICC website at [www.iccsafe.org](http://www.iccsafe.org). If you have previously executed the copyright release for this cycle, please check the box below:**

**2009/2010 Cycle copyright release on file**

3) Indicate appropriate International Code(s) associated with this Public Proposal – Please use Acronym: **IBC, IEBC, IFC, IFGC, IPC, IPSDC, IPMC, IWUIC, IZC, IECC, IMC and IRC**

If you have also submitted a separate coordination change to another I-Code, please indicate the code: **See above, #3** (See section below for list of names and acronyms for the International Codes).

4)

**Be sure to format your proposal and include all information as indicated below and in the Code Change Proposal Instructions' section on Page 2 of this form.**

5)

Proposals should be sent to the following offices via regular mail or email. An e-mail submittal is preferred, including an electronic version, in either WordPerfect or Word. The only formatting that is needed is **BOLDING, STRIKEOUT AND UNDERLINING**. Please do not provide additional formatting such as tabs, columns, etc., as this will be done by ICC. **REMOVE TRACKING CHANGES, AUTOMATIC NUMBERING, OR ANY OTHER ADVANCED FORMATTING TOOLS THAT ARE PROVIDED BY WORD, FROM FILES CONTAINING YOUR CODE CHANGE PROPOSAL THAT YOU SEND TO ICC.**

Please use a separate form (see page 3) for each proposal submitted. Note: All code changes received will receive an acknowledgment by approximately June 21, 2009. Please contact the ICC staff listed below if you do not receive an acknowledgment by June 21, 2009.

Please check here if separate graphic file provided.  Graphic materials (Graphs, maps, drawings, charts, photographs, etc.) must be submitted as separate electronic files in .CDR, IA, TIF or .JPG format (300 DPI Minimum resolution; 600 DPI or more preferred) even though they may also be embedded in your Word or WordPerfect submittal.

**Code**

- IBC - International Building Code
- IEBC - International Existing Building Code
- IFC - International Fire Code
- IFGC - International Fuel Gas Code
- ICC PC - ICC Performance Code
- IPC - International Plumbing Code
- IPSDC - International Private Sewage Disposal Code
- IPMC - International Property Maintenance Code
- IWUIC - International Wildland-Urban Interface Code
- IZC - International Zoning Code

**Send to:**

International Code Council  
Chicago District Office  
Attn: Diane Schoonover  
4051 West Flossmoor Road  
Country Club Hills, IL 60478-5795  
Fax: 708/799-0320  
[codechanges@iccsafe.org](mailto:codechanges@iccsafe.org)

- IECC - International Energy Conservation Code
- IMC - International Mechanical Code
- IRC - International Residential Code

International Code Council  
Birmingham District Office  
Attn: Annette Sundberg  
900 Montclair Road  
Birmingham, AL 35213-1206  
Fax: 205/592-7001

## CODE CHANGE PROPOSAL INSTRUCTIONS

Please provide all of the following items in your code change proposal (see form on page 3). Your proposal should be entered on page 3 as a separate file. However, please read the instructions provided below for each part of the code change proposal. The sections identified in parentheses are the applicable sections from CP #28 Code Development. The full procedures can be downloaded from [www.iccsafe.org](http://www.iccsafe.org).

### PROPOSAL FORMATTING:

Show the proposal (see form on page 3) using ~~strikeout~~, underline format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

The only formatting that is needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns etc. as this will be done by ICC. **DO NOT USE THE TRACKING CHANGES OPTION, AUTOMATIC NUMBERING, OR ANY OTHER ADVANCED FORMATTING TOOLS PROVIDED BY WORD.**

### SUPPORTING INFORMATION: (3.3.4 & 3.4)

The following items are required to be included in your proposal (see form on page 3):

1. The proponent shall clearly state the purpose of the proposed code change (e.g., clarify the Code; revise outdated material; substitute new or revised material for current provision of the Code; add new requirements to the Code; delete current requirements, etc.)
2. The proponent shall justify changing the current code provisions, stating why the proposal is superior to the current provisions of the Code. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current Code provisions are inadequate or overly restrictive, specifies the shortcomings of the current Code provisions and explains how such proposals will improve the Code.
3. The proponent shall substantiate the proposed code change based on technical information and substantiation. Substantiation provided which is reviewed in accordance with Section 4.2 and determined as not germane to the technical issues addressed in the proposed code change shall be identified as such. The proponent shall be notified that the proposal is considered an incomplete proposal in accordance with Section 4.3, and the proposal shall be held until the deficiencies are corrected. The proponent shall have the right to appeal this action in accordance with the policy of the ICC Board. The burden of providing substantiating material lies with the proponent of the code change proposal. A minimum of two copies of all substantiating information shall be submitted.
4. The proponent shall submit a bibliography of any substantiating material submitted with the code change proposal. The bibliography shall be published with the code change and the proponent shall make the substantiating materials available for review at the appropriate ICC office and during the public hearing.

### REFERENCED STANDARDS: (3.4 & 3.6)

List any new referenced standards that are proposed to be referenced in the code and provide a minimum of two copies. For ICC rules on referenced standards, see Section 3.6 of CP #28. Additional copies will be required for committee members. ICC staff will provide you with a mailing list for the appropriate committees.

### COST IMPACT: (3.3.4.6)

The proponent shall indicate one of the following regarding the cost impact of the code change proposal:

- 1) The code change proposal will increase the cost of construction; or
- 2) The code change proposal will not increase the cost of construction.

This information will be included in the published code change proposal.

### CODE CHANGE SUBMITTAL EXAMPLE

**Code:** IBC-09/10  
**705.1**

**Proponent:** John Doe, P.E., Acme Building Corporation, Inc, representing himself

**Revise as follows:**

**705.1 General.** Each portion of a building separated by ~~one or more~~ a fire walls that ~~comply~~ complies with the provisions of ~~this section~~ Section 705 shall be considered a separate building.

**Reason:** A fire wall complying with Section 705 establishes the equivalent of separate buildings on either side of the fire wall. This proposal provides text that more succinctly states this purpose of a fire wall.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee: AS      AM      D

Assembly: ASF AMF DF

# CODE CHANGE PROPOSAL FORM

(See instructions on page 2)

**Code: See Below:–09/10** (IBC, IEBC, IECC, IFC, IFGC, IMC, IPC, IPSCDC, IPM, IRC, ICCPC, IWUIC, IZC)

**Proponent:** Zaida Basora, AIA, Building Official, City of Dallas; in consultation with the Codes Committee of the U.S. Green Building Council

## Part 1: International Building Code

Section 101.3. Revise as follows:

**101.3 Intent.** The purpose of this code is to establish the minimum requirements for the built environment to safeguard the public health, safety and general welfare through provisions that address:

1. Structural strength, means of egress facilities, stability, durability, sanitation, adequate light and ventilation, energy conservation and accessibility;
2. Safety to life and property from fire and other hazards attributed to the built environment; ~~and to provide~~
3. Safety ~~to~~ of fire fighters and emergency responders during emergency operations; ~~and~~
4. Sustainable practices in building design, construction and use.

## Part 2: International Residential Code

Section R101.3. Revise as follows:

**R101.3 Intent.** The purpose of this code is to establish the minimum requirements for the built environment to safeguard the public health, safety, ~~health~~ and general welfare through provisions which address:

1. Affordability, structural strength, means of egress facilities, stability, durability, sanitation, light and ventilation, ~~and~~ energy conservation ~~and~~;
2. Safety to life and property from fire and other hazards attributed to the built environment; ~~and to provide~~
3. Safety ~~to~~ of fire fighters and emergency responders during emergency operations; ~~and~~
4. Sustainable practices in building design, construction and use.

## Part 3: International Mechanical Code

Section 101.3: Delete and replace in its entirety as follows:

**101.3 Intent.** The purpose of this code is to establish the minimum requirements for mechanical equipment and systems in the built environment to safeguard the public safety, health and general welfare through provisions that address:

1. Design, quality of materials, construction and installation, durability, operation and maintenance;
2. Safety to life and property from fire and other hazards attributed to the built environment; and
3. Sustainable practices in building design, construction and use.

## Part 4: International Fuel Gas Code

Section 101.4: Delete and replace in its entirety as follows:

**101.4 Intent.** The purpose of this code is to establish the minimum requirements for fuel gas equipment and systems in the built environment to safeguard the public safety, health and general welfare through provisions that address:

1. Design, quality of materials, construction and installation, durability, operation and maintenance;
2. Safety to life and property from fire and other hazards attributed to the built environment; and
3. Sustainable practices in building design, construction and use.

## **Part 5: International Plumbing Code**

### **Section 101.3: Delete and replace in its entirety as follows:**

**101.3 Intent.** The purpose of this code is to establish the minimum requirements for plumbing equipment and systems in the built environment to safeguard the public safety, health and general welfare through provisions that address:

1. Design, quality of materials, construction and installation, durability, operation and maintenance;
2. Safety to life and property from fire and other hazards attributed to the built environment; and
3. Sustainable practices in building design, construction and use.

## **Part 6: International Private Sewage Disposal Code**

### **Section 101.3: Delete and replace in its entirety as follows:**

**101.3 Intent.** The purpose of this code is to establish the minimum requirements for private sewage disposal equipment and systems in the built environment to safeguard the public safety, health and general welfare through provisions that address:

1. Design, quality of materials, construction and installation, durability, operation and maintenance;
2. Safety to life and property from fire and other hazards attributed to the built environment; and
3. Sustainable practices in building design, construction and use.

## **Part 7: Appendix K of International Building Code (electrical administration):**

### **Section K101.3: Delete and replace in its entirety as follows:**

**K101.3 Intent.** The purpose of this code is to establish the minimum requirements for electrical equipment and systems in the built environment to safeguard the public safety, health and general welfare through provisions that address:

1. Design, quality of materials, construction and installation, durability, operation and maintenance;
2. Safety to life and property from fire and other hazards attributed to the built environment; and
3. Sustainable practices in building design, construction and use.

## **Part 8: International Energy Conservation Code**

### **Section 101.3: Revise as follows:**

**101.3 Intent.** This code shall regulate the design and construction of buildings through provisions that address sustainable practices for the effective use of energy. This code is intended to provide flexibility to permit the use of innovative approaches and techniques ~~to achieve the effective use of energy~~. This code is not intended to abridge, but to augment, safety, health or environmental requirements contained in other applicable codes and ordinances.

## Part 9: International Fire Code

### Section 101.3: Revise as follows:

**101.3 Intent.** The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice 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, structures and premises and to provide safety to fire fighters and emergency responders during emergency operations. This code is not intended to abridge, but to augment, safety, health or environmental requirements contained in other applicable codes and ordinances.

## Part 10: International Existing Buildings Code

### Section 101.3: Revise as follows:

**101.3 Intent.** The intent of this code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard public health, safety and general welfare insofar as they are affected by the repair, alteration, change of occupancy, addition and relocation of existing buildings. This code supports responsible alteration and reuse of buildings to enhance and protect the long term investment of materials and resources in existing structures.

## Part 11: International Property Maintenance Code

### Section 101.3: Revise as follows:

**101.3 Intent.** This code shall be construed to secure its expressed intent, which is to ensure public health, safety and general welfare in so far as they are affected by the continued occupancy and maintenance of structures and premises. This code supports the responsible performance and maintenance of buildings to protect the long term investment of materials and resources inherent in existing structures. Existing structures and premises that do not comply with these provisions shall be altered or repaired to provide a minimum level of health and safety required herein.

## Part 12: International Wildland Urban Interface Code

### Section 101.3: Revise as follows:

**101.3 Objective.** The objective of this code is to establish minimum regulations consistent with nationally recognized good practice for the safeguarding of life and property. Regulations in this code are intended to mitigate the risk of life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels. This code encourages the maintenance of the investment of materials and resources in buildings and structures and the preservation of surrounding wildland resources. The extent of this regulation is intended to be tiered commensurate with the relative level of hazard present.

The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire-protection facilities to control the spread of fire in wildland-urban interface areas shall be in accordance with this code.

This code shall supplement the jurisdiction's building and fire codes, if such codes have been adopted, to provide for special regulations to mitigate the fire- and life-safety hazards of the wildland-urban interface areas.

## Part 13: International Zoning Code

### Section 101.2: Revise as follows:

**101.2 Intent.** The purpose of this code is to safeguard the public health, property and ~~public~~ general welfare by controlling the design, location, use or occupancy of all buildings and structures through ~~regulated and,~~ regulations supporting long term solutions, that result in orderly development of land and land uses within this jurisdiction that are sensitive to the environment and the community.

## Reason:

## General:

**Purpose:** Align the intent statements of the I-Codes for consistency, reformat the statements for improved clarity, and add a provision for sustainability to the intent statements: "Sustainable practices in building design, construction and use."

**Note:** This code proposal updates the Intent section of each of the I-Codes to incorporate sustainability as a core principle. The intent statements vary widely from one code to the next so the language varies accordingly but the principle is the same and this proposal strives to update some outdated language, maintain specific relevance, and improve consistency and clarity.

### 1. INTEGRATING PUBLIC HEALTH, SAFETY AND WELFARE AND THE ENVIRONMENT

This proposal recognizes a fundamental link between "safeguarding the public health, safety and general welfare" and preserving a safe and healthy natural environment. There is widely recognized and growing evidence that many of the immediate and cumulative negative impacts of the built environment threaten the health and viability of the natural systems underlying human health and welfare. The importance of this connection has been acknowledged in policy positions of the International Code Council and organizations including the American Institute of Architects (AIA), the American Society of Civil Engineers (ASCE), the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), the American Planning Association (APA), the World Business Council for Sustainable Development (<http://www.wbcsd.org/web/about/members.html>), which includes many of the largest companies in the US and the world, and many others.

The health and welfare of humans and society depend directly on the health and viability of ecological and natural systems and on many critical non-renewable resources. Safeguarding the public from hazards attributed to the built environment necessarily includes addressing these larger hazards created by building practices. The benefits of enabling more sustainable practices extend beyond improving environmental and human health, to creating a more sustainable economy, greater social equity and more resilient communities. Improving the efficiency of resource use, reducing waste and pollution, improving indoor environmental quality, and enabling water and energy saving strategies relieve pressures on public infrastructure, reduce public expenditures, and increase health and productivity of everyone, at home, in schools and at work.

### 2. NOT REPLACING EXISTING PROVISIONS OR COMPROMISING SAFETY

Adding sustainability to the intent of the code does not negate any other provisions. Sustainability identifies a consideration that, in addition to existing safety goals, addresses systemic risks, providing increased safety with respect to the cumulative impacts of construction-related activities that create risks to building occupants, the general public, and future generations. Though these are hazards attributable to the built environment, and thus part of the responsibility for safeguarding the public, they have not previously been recognized or explicitly acknowledged in the codes. Adding this provision will aid code officials in interpreting the codes as supporting practices that seek to address both the current concerns and the large-scale and long-term risks that are emerging. Code enforcement during plan review and site inspections determines the fundamental safety conditions of a building that will impact the health and safety of occupants for the life of the building after the Certificate of Occupancy is issued. Consideration of more sustainable practices is important for maintaining safety both in the immediate and long term.

### 3. STATEMENTS ON SUSTAINABILITY

Incorporating sustainability into the intent and purpose statements of the I-Codes is parallel to commitments and statements made by several leading organizations representing regulatory bodies and the design, building and development sectors.

AIA (American Institute of Architects):

A. Excerpted from "AIA Position Statement #41 on Sustainable Built Environment," December 2008  
*"The AIA supports governmental and private sector policy programs, and incentives to encourage a built environment that embodies the advantages of sustainable architecture."*  
<http://www.aia.org/aiaucmp/groups/aia/documents/pdf/aia078764.pdf>

B. Excerpted from "Sustainable Architectural Practice Position Statement," 2005:

*"The AIA recognizes a growing body of evidence that demonstrates current planning, design, construction, and real estate practices contribute to patterns of resource consumption that seriously jeopardize the future of the*

*Earth's population. Architects need to accept responsibility for their role in creating the built environment and, consequently, believe we must alter our profession's actions and encourage our clients and the entire design and construction industry to join with us to change the course of the planet's future."*

<http://www.aia.org/aiaucmp/groups/aia/documents/pdf/aia077734.pdf>

APA (American Planning Association):

Excerpted from the "Policy Guide on Planning for Sustainability" – Section I: Findings, April 2000:

*"...Over the last 40 years, the increase in per capita energy and material consumption has increased even faster than the world's human population. Scientists estimate that our present consumption level is exceeding the Earth's carrying capacity by 30%. We are making up that difference by depleting "natural capital". The United States leads the world in material consumption and waste generation..."*

*"...Modern economies rely on a host of substances that are not part of nature's cycle of growth and decay. Because these substances are not renewable, their supplies are constantly diminishing. This causes competition for limited resources, with societal repercussions and resulting damage to the environment..."*

*"...The use of substances that accumulate in the ecosphere and are not part of nature's cycle causes environmental pollution in various forms. Carbon dioxide has increased 30% over its natural occurrence in our atmosphere. Poisonous elements mined from below the Earth's crust, such as cadmium and lead, are found at five and eight times, respectively, their natural rates in the ecosphere. Over 70,000 chemical compounds are now present and accumulating in the ecosphere. Many of these may be toxic to humans or other species."*

<http://www.planning.org/policy/guides/adopted/sustainability.htm>

ASCE (American Society of Civil Engineers):

A. Excerpted from "ASCE Code of Ethics" –Fundamental Canons, July 2006, the first of which states:

*"1. Engineers shall hold paramount the safety, health and welfare of the public and shall strive to comply with the principles of sustainable development in the performance of their professional duties."*

<http://www.asce.org/inside/codeofethics.cfm>

B. Excerpted from "The Role of the Civil Engineer in Sustainable Development" – Policy Statement #418, April 2007:

*"ASCE Code of Ethics requires civil engineers to strive to comply with the principles of sustainable development in the performance of their professional duties."*

[http://www.asce.org/pressroom/news/policy\\_details.cfm?hdlid=60](http://www.asce.org/pressroom/news/policy_details.cfm?hdlid=60)

ASHRAE (American Society of Heating, Refrigeration and Air-conditioning Engineers):

Excerpted from "Sustainability Roadmap," January 2006

*"To achieve and maintain a position of leadership, ASHRAE will:*

- Expand our efforts to foster sustainable buildings.*
- Conduct our own affairs of the Society in a sustainable manner...*
- Integrate building sustainability principles, effective practices and emerging concepts into all appropriate ASHRAE standards, guidelines, research, Handbook chapters, and other publications."*

[http://www.ashrae.org/docLib/200621485921\\_886.pdf](http://www.ashrae.org/docLib/200621485921_886.pdf)

ICC (International Code Council):

A. Excerpted from "Council Policy #35 - 08 – Sustainable Building Technology Committee," September 2008

*"...2.1 To work for the continual improvement of ICC Codes, Standards and Guidelines in the areas of sustainability and high performance. This includes the development of proposed code changes, and analysis/response to sustainability-related changes submitted by others..."*

<http://www.iccsafe.org/news/about/pdf/CP35-08.pdf>

B. Excerpted from "Council Policy Position on Green Buildings/Sustainable Communities" – ICC PS 1-2006

*"...The Code Council must lead the building safety field: ...*

- In monitoring and advocating in the legislative, regulatory and codes arena to give Code Council members the opportunity to speak for sustainable building safety;*
- Promote the environmental features of the I-Codes and reinforce the understanding that safety and sustainability are both achievable;*
- Promote the understanding that the I-Codes and the Code Council safety system facilitate the application of sustainable building policy..."*

[http://www.iccsafe.org/news/green/Green\\_Building\\_policy.pdf](http://www.iccsafe.org/news/green/Green_Building_policy.pdf)

#### **4. SOCIAL VALUE / PUBLIC GOOD**

The history of building codes and standards reveals a continuous evolution in understanding and addressing risks as society recognizes them and deems them important enough to require regulation. Public health, safety, and general welfare represent evolving social values. Addressing accessibility of building facilities for users with disabilities is an example of a social issue that was at one time unaddressed by codes and now is fully addressed throughout the building code, in other codes, and as a separate ANSI standard. Affordability, a social issue, is now addressed in the intent statement of the IRC. The NAHB wrote in its supporting statement for adding affordability to the code, "inclusion of "affordability" in the IRC is needed to clarify that safeguarding the public welfare includes concerns about the affordability of housing". The same is true for sustainability. Whether it is through protecting the health of community or regional ecosystems, saving costs of operations and maintenance, reducing negative community impacts, reducing demand for electricity and water, improving occupant and employee health and productivity, or maintaining clean air, the public is demanding better buildings that address these important concerns.

#### **5. BUILDING IMPACTS - LOCAL**

Buildings never exist in isolation. They provide a visible, tangible component of the physical infrastructure of a place, town or region. And no matter where it is located, a building has impacts related to its initial construction and the resources necessary to sustain it over time. Whether it is the utility system, the traffic system, the waste stream, flows of equipment and supplies for operations, or the micro-climate impacts of shade, heat, wind or storm runoff, the permitted designs and methods of construction will affect the building occupants and the surrounding environment of the jurisdiction for its lifetime and beyond.

#### **6. BUILDING IMPACTS - GLOBAL**

There are negative impacts at every point of the lifecycle of a material or product – whether at extraction or harvest, transport or distribution, alteration or manufacture, construction, installation, use, and later deconstruction, demolition, or destruction. Given that the citizens of a jurisdiction, of a region and even citizens of the world pay the price when such impacts are unregulated and unchecked—effectively externalized to the Commons—and that those impacts are now widely recognized, the public and leading industries and businesses should address these broader impacts. Local activities have both local and global consequences, with both short- and long-term effects. This reality needs to be an inherent part of the process of designing, regulating, building and operating buildings. Incorporating sustainability into the intent provisions of the I-Codes begins the process of acknowledging this reality and its importance.

#### **7. INDUSTRY ADVANCING**

In recent years industry professionals and the public have developed a new understanding that short-term focus on first costs along with wasteful building practices can lead to long term costs and system failures. In the arena of energy efficiency, the cheapest, easiest building to construct often becomes the costliest, most maintenance-intensive building to operate. Buildings full of chemicals that retard moisture, rot, mildew, insects, or flame-spread are, in some cases, negatively impacting the health of building occupants. Industry is learning from and adapting to market demand for better buildings and emerging information from the fields of building science, biology, ecology and human health, and it is essential that knowledge be integrated into standard practice. Building regulations should support, not impede this transition to healthier, more sustainable practice.

#### **8. NOT GREEN BUILDING CODE**

This is not a green building provision. Green buildings are typically considered above-code or high performance buildings and rating systems exist to define them. New green building codes will set standards for green building designs in enforceable language. As some green building practices become commonplace they will find their way into the ICC family of codes. Having sustainability as a scoping provision will provide the vehicle for transitioning to more sustainable building construction over time. While green buildings may be more likely to be sustainable buildings, they are not necessarily sustainable just because they meet the criteria of a rating system.

#### **9. NOT DEFINING SUSTAINABILITY**

Just as the terms "health," "safety," and "welfare" are not defined in the code, we will not attempt to define Sustainability here. This will be for code officials to determine during the consideration of future code proposals one at a time – each on its own merit. The level of safety within the codes is decided by each final action proposal that is passed by ICC membership. Consideration is given to balancing the risks to public health, safety, and welfare against the costs for compliance and consequences of enforcement on building owners, occupants and safety professionals. This will not change.

#### **10. NOT TOO EARLY**

Sustainability addresses a set of issues that are increasingly recognized as urgent today, are already included in many European and other national codes, and should already be in U.S. codes. Regulations always lag behind both innovation and the emergence of new risks or new understanding about existing risks. The design, construction and

development industry is already well ahead of the codes and this will only increase in coming years. As it stands, the codes affected by this proposal will not be published until 2012, and will likely not be widely adopted for several more years after publication, meaning that official recognition of the need to incorporate sustainable practices into the building regulatory system will not appear for several years. The changes proposed set the stage for more rapid acceptance and advancement of changes that are already taking place. As techniques, methods and strategies make their way into the market, they will become the norm. As they become the norm, they become candidates for code requirements. Without explicit support for such changes, the codes will be an impediment to responsible change, rather than increasing public safety and welfare. Response to water and energy shortages, climate change and other factors are already driving many jurisdictions to develop their own ordinances, codes and standards in efforts to address realities that exist on the ground today. There should be no question about the need to incorporate these changes in the 2012 family of International Codes.

## **Explanation of Proposed Changes to Each Code:**

### **Part 1: Section 101.3, Intent of the 2009 IBC reads as follows:**

**101.3 Intent.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

In developing the 13 proposed revisions to 12 International Codes, the existing intent statement of the IBC formed the base platform from which the proposals for all the other codes were then constructed. The existing intent of the IBC already covers many topics but it doesn't fully address the total scope of the current code. The primary intent of this proposal is to add one provision which clarifies the code's role in supporting the shift to sustainable building practices. This is principally accomplished by adding item 4 to the existing three items in the IBC intent statement but also by adding 'durability' to the first item. It became clear to us in developing this proposal that the existing intent statements would be clearer to all if reformatted. Therefore, the final piece of the proposal is a revised format. This proposal provides a clearer format for the intent statement by creating a list. The existing intent statement results in Items 1 through 3. A final change for the IBC is to add 'accessibility' into Item 1's list of broad elements of the code. The IBC is the main location of accessibility standards in the International family of codes and that should be acknowledged in the intent statement.

### **Part 2: Section R101.3, Intent of the 2009 IRC**

The existing intent provisions of the IRC mirror the provisions of the IBC but with a slightly different listing of public health, safety and general welfare. This proposal for the IRC would make this intent statement consistent with the IBC intent statement with one key difference. The existing IRC intent section includes the word 'affordability' in its provisions. This is unique to the IRC and this proposal does nothing to change that nor to extend it to other codes. This proposal continues the parallel construction already existing between the IBC and IRC and would add the same text as proposed for the IBC as well as establishing the same format.

### **Parts 3 through 7: Intent sections of the IMC, IFGC, IPC, IPSDC and Appendix K of the IBC**

These four codes and Appendix K of the IBC are similar codes to each other in that they address specific systems within and serving the building. They are also similar to the IBC and IRC in that they are primarily 'new construction codes'. As similar codes, their existing intent statements are very similar to each other, with unique text for each discipline. However these intent statements are significantly different than the IBC or IRC statements. As an example of these intent statements, the IMC Section 101.3 is shown below:

**101.3 Intent.** The purpose of this code is provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of mechanical systems.

The proposals for these 4 codes and the electrical administrative provisions of IBC Appendix K provide similar language and format to the proposals for the IBC and IRC, yet maintain the unique focus of each code's intent. Language was modernized and made consistent with the IBC and IRC in stating that the intent is to 'safeguard the public health, safety and general welfare. Because the revisions were presented in a new format, it was clearer to

show these proposals as 'delete and replace' text. Existing intent provisions from these 5 documents is provided in the charging text and Items 1 and 2. Item 3 reflects the goal of sustainable practices for each system.

### **Part 8: Section 101.3, Intent of the IECC**

The IECC is already a sustainable practices code. Therefore the existing intent fairly well addresses the need for minimizing the use of energy by buildings constructed under its provisions. The proposed changes are mostly to establish similar language as provided in the other proposals. Further, we propose adding the text to clarify that the IECC doesn't supersede the safety standards of the other construction codes, but is a partner with them. The intent of the IECC does not lend itself to the same formatting as proposed for the 7 previous codes.

### **Parts 9 through 11, Intent sections of the IFC, IEBC and IPMC**

These three codes do not have a primary focus of new construction as covered by codes in Parts 1 through 8, but have a primary focus on the maintenance of existing buildings in a safe and occupiable condition. (Although the IFC does contain many new construction standards.) One can say that these codes are already fully engaged in sustainability. The whole concept of taking action to maintain buildings so that they will survive and that people in them won't be harmed by what is in them is embodied in each of these codes. As such their existing intent statements already differ significantly from the 'construction' codes. However the phrasing and text in the existing intent statements was not consistent with each other, or with similar language in the construction codes.

**IFC:** The IFC has many of the provisions found in the IBC Intent Section 101.3 spread in two sections - 101.2 Scope and 101.3 Intent. For your convenience Section 101.2 is reproduced below: It is already in the list format we've proposed for the construction codes.

**101.2 Scope.** This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises.
3. Fire hazards in the structure or on the premises from occupancy or operation;
4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.

Therefore the only proposed amendment is to Section 101.3. This proposal adds a sentence parallel to the sentence which is present in the IECC. That proposed sentence is: This code is not intended to abridge, but to augment, safety, health or environmental requirements contained in other applicable codes and ordinances.

**IEBC:** While the title is the Existing Building Code, its primary purpose is addressing the reuse of existing buildings as well as guiding additions and alterations. Reuse and upgrading the existing building stock is perhaps one of the most 'sustainable' practices in development. The IEBC provides alternatives for compliance that encourages use of existing materials, yet upgrading to current standards and technologies where appropriate. The proposed new sentence is intended to make plain the goal of this code and how it relates to the sustainability of development as it relates to existing buildings. The term "general" was added for consistency with other codes.

**IPMC:** The Property Maintenance Code only addresses maintenance of existing structures and their continued safe use. It does not address remodeling or other upgrades as addressed in the IEBC. The basic intent of the IPMC is keeping what is there in good condition so that use can be continued and is safe and healthy. In a broad sense the IPMC is a code about sustainability. The proposed new sentence is intended to make plain the goal of this code and how it relates to the sustainability of existing buildings.

### **Part 12, Section 101.3 The "Objective" of IWUIC**

The IWUIC is unique in many ways. First it doesn't have an "Intent" section, but rather it has an "Objective". It is also unique in that it provides for construction standard for buildings in fire risk areas, but also contains maintenance provisions. Perhaps the IWUIC can be viewed as ICC's first "green" code in that it addresses the need for the built environment and the natural environment to co-exist. Its goal could be summarized by saying it intends to keep the forest wildlands from burning down the built environment and to keep the built environment from burning down the neighboring wildlands. Similar to the proposals to the IEBC and IPMC, the proposed additional language is only to make plain this existing intent of the IWUIC

**Part 13, Section 101.2. Intent of the IZC.**

The IZC is another unique code in the ICC galaxy of codes. While the balance of the International Codes are focused on building construction and maintenance, the IZC is focused on the rational use of land. Yet while the IZC should be more closely linked to the use of the key resource, land; its intent statement doesn't clearly address sustainability. Because of its unique role, the proposal is also unique through enhancing the codes focus on long term solutions to zoning decisions as well as the clearly needed statement of relating zoning development to the existing environment - be that the natural environment or the community environment.

**Part XX - The Performance Code**

The Performance Code was reviewed to determine if similar revisions needed to be proposed. There are already numerous, and sufficient goals statements spread throughout the Performance Code. No additional revisions are proposed.

**Cost Impact:** This proposal will not increase the cost of construction. Subsequent proposals by others addressing sustainable practices may increase initial construction costs, however, a growing body of evidence indicates that more sustainable design and building practices often have no cost implications and sometimes reduce construction costs, while typically reducing operating costs and other negative impacts, improving the long-term affordability of ownership and operation.

|                            |     |     |    |
|----------------------------|-----|-----|----|
| Public Hearing: Committee: | AS  | AM  | D  |
| Assembly:                  | ASF | AMF | DF |

---



COPYRIGHT RELEASE FOR  
2009/2010 PROPOSALS, MODIFICATIONS and PUBLIC COMMENTS  
SUBMITTED ON  
ICC CODES  
PRODUCED & PUBLISHED BY THE  
INTERNATIONAL CODE COUNCIL

This form is required for all Proposals, Floor Modifications and Public Comments submitted to the International Code Council. Only one signed Copyright release form is required for the entire 2009/2010 Cycle and will be kept on file and can be used for all Proposal, Floor Modification and Public Comment submittals you submit to ICC unless you represent multiple entities. An executed form is required for each entity represented.

I hereby grant and assign to ICC all rights in copyright I may have in any authorship contributions I make to ICC in the 2009/2010 Cycle in connection with any proposal and public comment, in its original form submitted or revised form, including written and verbal modifications submitted in accordance with Section 5.5.2 of CP #28. I understand that I will have no rights in any ICC publications that use such contributions in the form submitted by me or another similar form and certify that such contributions are not protected by the copyright of any other person or entity.

**Signature:** \_\_\_\_\_

Please type or print full name: Zaida Basora, AIA, Building Official

Jurisdiction/Company: City of Dallas, Texas

Entity Represented: City of Dallas, Texas

Contact info: Phone: 214-948-4364 Email: zaida.basora@dallascityhall.com

Date signed: June 1, 2009

PLEASE FAX OR MAIL THE SIGNED COPYRIGHT RELEASE TO:

**Fax: ICC Codes & Standards Department - 708-799-0320**

**Mail: ICC Codes & Standards Development  
Chicago District Office  
4051 W. Flossmoor Road  
Country Club Hills, IL 60478-5795**