



10.

**International Green Construction Code  
KTCF-12-11**

**RESOLUTION OF THE KAYENTA TOWNSHIP COMMISSION**

**Approving the Adoption of the 2010 International Green Construction Code.**

**WHEREAS:**

1. The Kayenta Township Commission ("KTC") has the general authority and responsibility to govern for the welfare of the Kayenta Township ("Township") and its residents including the enactment of such ordinances, rules and regulations as it deems in the best interest of the Township; and
2. Pursuant to this authority, the KTC desires to adopt the 2010 International Green Construction Code (IGCC) on a voluntary basis Exhibit "A"; and
3. The IGCC green building design requirements for the Township have followed a selected compliance path exclusive for the Township, Exhibit "B"; and
4. The Township Building and Safety Department has gathered support and input from other Government agencies during development of the IGCC, Exhibit "C" ; and
5. The Township staff has allowed for adequate Public Notice time for comment Exhibit "D"; and
6. The development of the 2010 IGCC and brief narrative are attached as, Exhibit "E".

**NOW, THEREFORE BE IT RESOLVED THAT:**


1. The KTC hereby approves the adoption of the 2010 IGCC on a voluntary basis, Exhibit "A".
2. The KTC hereby approves the Township Building & Safety Department to enforce the 2010 IGCC according to the requirements of, Exhibit "B".
3. The KTC hereby authorizes the Town Manager to execute the necessary documents needed on behalf of the Kayenta Township.
4. The KTC hereby authorizes its Chairperson to approve this resolution.

**CERTIFICATION**

I hereby certify that the foregoing resolution was duly considered by the Kayenta Township Commission at a duly called meeting at Kayenta, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 4 in favor, 0 opposed, and 0 abstained, this 14<sup>th</sup> day of February, 2011.

Motion: Commissioner Bonnaha  
Second: Commissioner Greyeyes

KAYENTA TOWNSHIP COMMISSION



  
\_\_\_\_\_  
Chairperson, Andre Cordero

A MEMBER OF THE INTERNATIONAL CODE FAMILY™



# INTERNATIONAL GREEN CONSTRUCTION CODE™

PUBLIC VERSION 1.0, MARCH 2010

-  **ASHRAE/USGBC/IES STANDARD 189.1-2009**  
**STANDARD FOR THE DESIGN OF HIGH-PERFORMANCE GREEN BUILDINGS -**  
**A JURISDICTIONAL COMPLIANCE OPTION OF THE IGCC**
-  **ICC® 700-2008 NATIONAL GREEN BUILDING STANDARD™ -**  
**FOR RESIDENTIAL OCCUPANCIES (*by reference*)**



**THE AMERICAN  
INSTITUTE  
OF ARCHITECTS**





**KAYENTA TOWNSHIP  
BUILDING & SAFETY DEPARTMENT  
P.O. BOX 1490**

**KAYENTA, ARIZONA 86033**

**PHONE: (928) 697-8451**

**FAX: (928) 697-8461**

February 9, 2011

### **Jurisdictional Requirements for IgCC version 2.0**

- 302.0 Provisions of IgCC more flexible than ASHRAE 189.1.
- 302.1(3) Total Project Elective requirements is 9 (Version 1.0 total was 5).
- 402.2.3 Conservation areas will be zoned into the **Zoning Ordinance**.
- 402.2.5 Agricultural areas will be regulated by **Zoning Ordinance**.
- 402.2.6 Greenfields will be zoned into the **Zoning Ordinance**.
- 402.3.2 Rainfall amounts not consistent enough to harvest and sudden occurrences lack a study to determine containment.
- 403.4.1 Parking spaces can be designated, but owner's responsibility to enforce.
- 403.4.2 These type of vehicles not in daily use within the community.
- 405.1 Will be included in the **Zoning Ordinance**.
- 502.1 Lowest percentage that can be selected.
- 602.3.2.3 Department not staffed to perform.
- 613.2 Department not staffed to perform.
- 702.1.2 Fixtures currently readably available on the market.
- 702.7 Municipal water managed by NTUA.
- 904.1.1.1 To be supported by township resolution and **Zoning Ordinance**.
- 1006.4 If a permit is obtained department can provide service.
- Appendix
  - B Feasibility study needed prior to selecting as a requirement.
  - C There's enough products on the market to initiate a program.
  - D Enforcement protocol not in place to enforce code as an ordinance.

## CHAPTER 3

## JURISDICTIONAL REQUIREMENTS AND PROJECT ELECTIVES

SECTION 301  
GENERAL

**301.1 Scope.** This chapter contains: requirements that are specific to and selected by the *jurisdiction*; elective requirements that are specific to the project and selected by the owner; and provisions for whole-building life-cycle assessment.

**301.2 Jurisdictional Requirements and Project Electives.** This chapter requires that the *jurisdiction* indicate in Table 302.1 whether specific provisions are mandatory for all *buildings* regulated by this code and, where applicable, the level of compliance required. This chapter also contains *project electives*, as listed in Table 303.1, that become mandatory only as selected and indicated by the owner for the specific project. All other provisions of this code shall be mandatory as applicable.

SECTION 302  
JURISDICTIONAL REQUIREMENTS

**302.1 Requirements determined by the jurisdiction.** The *jurisdiction* shall indicate the following information in Table 302.1 for inclusion in its code adopting ordinance:

- 
1. The *jurisdiction* shall indicate whether ASHRAE 189.1 is applicable by selecting "Yes" or "No" in the optional compliance path in Table 302.1. Where "Yes" is selected, the administrative provisions of Chapter 1 of this code and the provisions of ASHRAE 189.1 listed in Chapter 12 shall apply and the remainder of this code shall not apply.
  2. The *jurisdiction* shall indicate the minimum number of *project electives* that must be incorporated into all projects, as modified by Section 303.2.
  3. Where the jurisdiction requires enhanced energy performance for buildings designed on a performance basis, and for buildings greater than 25,000 square feet in *total building floor area*, the *jurisdiction* shall indicate a *zEPI* of 46 or less in Table 602.1 for each occupancy required to have enhanced energy performance.
  4. Where "Yes" or "No" boxes are provided, the *jurisdiction* shall check the box to indicate "Yes" where that section or appendix is to be enforced as a mandatory requirement in the *jurisdiction*, or "No" where that section or appendix is *not* to be enforced as a mandatory requirement in the *jurisdiction*.
- 
- 4.1 Where "Yes" is selected for Appendix B, the *jurisdiction* shall select a compliance level phase in accordance with Section B103.1 by checking a box in Table 302.1 corresponding to Phase 1, 2, 3 or 4. The selection of higher phases requires that all lower phases be selected.
    - 4.1.1 Where Phase 1 is selected, the *jurisdiction* shall indicate the number of months to be used in association with Section B103.2.
    - 4.1.2 Where Phase 2 is selected, the *jurisdiction* shall indicate the number of years and the percentage to be used in association with Section B103.3.

4.1.3 Where Phase 3 is selected, the *jurisdiction* shall indicate the number of years to be used in association with Section B103.4.

4.1.4 Where Phase 4 is selected, the *jurisdiction* shall indicate the number of years and the percentage to be used in association with Section B103.5.

4.2 Where “Yes” is selected for other jurisdictional requirements in Table 302.1, the provisions of the indicated section shall apply.

**302.1.1 zEPI of 46 or less.** Where a *zEPI of 46* or less is indicated by the *jurisdiction* in Table 602.1, *buildings* shall comply on a performance-basis in accordance with Section 602.2.2.

**Exception:** Buildings less than 25,000 square feet in *total building floor area* pursuing compliance on a prescriptive basis shall be deemed to have a *zEPI of 51* in accordance with Section 602.2.1 and shall *not* be required to comply with the *zEPI of Jurisdictional Choice* indicated by the *jurisdiction* in Table 602.1.

**TABLE 302.1  
REQUIREMENTS DETERMINED BY THE JURISDICTION**

Section	Section Title or Description and Directives	Jurisdictional Requirements	
→			
<b>CH 3. JURISDICTIONAL REQUIREMENTS AND PROJECT ELECTIVES</b>			
302.1 (2)	Optional compliance path – ASHRAE 189.1	<input type="checkbox"/> Yes	<input type="checkbox"/> No
302.1 (3)	Project Electives – The jurisdiction shall indicate a number between 1 and 14 to establish the minimum total number of project electives that must be satisfied.	<u>9</u>	
<b>CH 4. SITE DEVELOPMENT AND LAND USE</b>			
→			
402.2.3	Conservation area	<input type="checkbox"/> Yes	<input type="checkbox"/> No
402.2.5	Agricultural land	<input type="checkbox"/> Yes	<input type="checkbox"/> No
402.2.6	Greenfields	<input type="checkbox"/> Yes	<input type="checkbox"/> No
402.3.2	Stormwater management	<input type="checkbox"/> Yes	<input type="checkbox"/> No
403.4.1	High occupancy vehicle parking	<input type="checkbox"/> Yes	<input type="checkbox"/> No
403.4.2	Low emission, hybrid and electric vehicle parking	<input type="checkbox"/> Yes	<input type="checkbox"/> No
405.1	Light pollution control	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>CH 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
→			
502.1	Minimum percentage of waste material diverted from landfills.	<input type="checkbox"/> 50% <input type="checkbox"/> 65% <input type="checkbox"/> 75%	
<b>CH 6. ENERGY CONSERVATION AND EARTH ATMOSPHERIC QUALITY</b>			
→			
Table 602.1, 302.1, 302.1.1	<i>zEPI of Jurisdictional Choice</i> – The jurisdiction shall indicate a <i>zEPI of 46</i> or less in Table 602.1 for each occupancy for which it intends to require enhanced energy performance.	See Table 602.1 and Section 302.1	
602.3.2.3	Total annual CO2e emissions limits and reporting	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Section	Section Title or Description and Directives	Jurisdictional Requirements	
613.2	Post Certificate of Occupancy zEPI, energy demand, and CO2e emissions reporting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>CH 7. WATER RESOURCE CONSERVATION AND EFFICIENCY</b>			
→			
702.1.2	Enhanced plumbing fixture and fitting flow rate tier.	<input type="checkbox"/> Tier 1 <input type="checkbox"/> Tier 2	
702.7	Municipal reclaimed water.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>CH 9. COMMISSIONING, OPERATION AND MAINTENANCE</b>			
904.1.1.1	Periodic reporting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>CH 10. EXISTING BUILDINGS</b>			
→			
1006.4	Evaluation of existing buildings	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>APPENDICES</b>			
Appendix B	Greenhouse gas reduction in existing buildings	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B103.1	Compliance level – The jurisdiction to select phases only where “Yes” is selected in the previous row.	<input type="checkbox"/> Phase 1 <input type="checkbox"/> Phase 2 <input type="checkbox"/> Phase 3 <input type="checkbox"/> Phase 4	
B103.2	Where “Phase 1” is selected under Section B103.1 – jurisdiction to indicate the number of months to be used in association with Section B103.2.	_____ months	
B103.3	Where “Phase 2” is selected under Section B103.1 – jurisdiction to indicate the number of years and the percentage to be used in association with Section B103.3.	_____ years _____ %	
B103.4	Where “Phase 3” is selected under Section B103.1 – jurisdiction to indicate the number of years to be used in association with Section B103.4.	_____ years	
B103.5	Where “Phase 4” is selected above – jurisdiction to indicate the number of years and the percentage to be used in association with Section B103.5.	_____ years _____ %	
Appendix C	Sustainability measures	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Appendix D	Enforcement procedures	<input type="checkbox"/> Yes	<input type="checkbox"/> No

### SECTION 303 PROJECT ELECTIVES

**303.1 Electives required.** A total of not less than the number of *project electives* as indicated by the jurisdiction in Section 302.1(2) of Table 302.1 shall be selected by the owner. Such *project electives* shall be applied as mandatory requirements to the project and shall be indicated to the *code official* by means of completion of Table 303.1. Electives identified by the jurisdiction as being “not available” are not available for selection.

**303.2 Additional elective.** Where required in accordance with Section 705.1, the total number of *project electives* indicated in Table 302.1 shall be increased by one.

**303.3 Applicability to existing buildings.** *Project electives* shall be applicable to existing *buildings* only where such *buildings* are evaluated in accordance with Section 1007.4.

**303.4 Project electives checklist.** The submitted *construction documents* shall include a completed copy of Table 303.1 indicating which *project electives* that the owner has selected as a means to comply with Section 303.1. The total number of *project electives* selected shall be in accordance with the minimum number of *project electives* indicated by the *jurisdiction* in Table 302.1. The *Project electives* selected shall be applied and enforced as mandatory requirements.

**TABLE 303.1  
PROJECT ELECTIVES CHECKLIST**

Section	Description	Check the corresponding box to indicate each project elective selected.	Jurisdictional determination of non-availability
<b>CH 3. JURISDICTIONAL REQUIREMENTS AND PROJECT ELECTIVES</b>			
304.1	Whole Building Life Cycle Assessment (LCA)	<input type="checkbox"/> (5 Electives <sup>a</sup> )	<input type="checkbox"/>
<b>CH 4. SITE DEVELOPMENT AND LAND USE</b>			
407.2.1	Flood hazard avoidance	<input type="checkbox"/>	<input type="checkbox"/>
407.2.2	Agricultural land	<input type="checkbox"/>	<input type="checkbox"/>
407.2.3	Wildlife corridor	<input type="checkbox"/>	<input type="checkbox"/>
407.2.4	Infill site	<input type="checkbox"/>	<input type="checkbox"/>
407.2.5	Brownfield site	<input type="checkbox"/>	<input type="checkbox"/>
407.2.6	Existing building reuse	<input type="checkbox"/>	<input type="checkbox"/>
407.2.7	Greenfield development	<input type="checkbox"/>	<input type="checkbox"/>
407.2.8	Greenfield proximity to development	<input type="checkbox"/>	<input type="checkbox"/>
407.2.9	Greenfield proximity to diverse uses	<input type="checkbox"/>	<input type="checkbox"/>
407.2.10	Native plant landscaping	<input type="checkbox"/>	<input type="checkbox"/>
407.2.11	Site restoration	<input type="checkbox"/>	<input type="checkbox"/>
407.3.1	Changing and shower facilities	<input type="checkbox"/>	<input type="checkbox"/>
407.3.2	Long term bicycle parking and storage	<input type="checkbox"/>	<input type="checkbox"/>
407.3.3	Preferred parking	<input type="checkbox"/>	<input type="checkbox"/>
407.4.1	Site hardscape 1	<input type="checkbox"/>	<input type="checkbox"/>
407.4.2	Site hardscape 2	<input type="checkbox"/>	<input type="checkbox"/>
407.4.3	Site hardscape 3	<input type="checkbox"/>	<input type="checkbox"/>
407.4.4	Roof covering	<input type="checkbox"/>	<input type="checkbox"/>
407.5	Light pollution	<input type="checkbox"/>	<input type="checkbox"/>
<b>CH 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
508.2	Waste management (502.1 + 20%)	<input type="checkbox"/>	<input type="checkbox"/>
508.3(1)	Reused, recycled content, recyclable, bio-based and indigenous materials (70%)	<input type="checkbox"/>	<input type="checkbox"/>
508.3(2)	Reused, recycled content, recyclable, bio-based and indigenous materials (85%)	<input type="checkbox"/> (2 Electives <sup>a</sup> )	<input type="checkbox"/>
<b>→</b>			
508.4.1	Service life – 100 year design life category	<input type="checkbox"/>	<input type="checkbox"/>
508.4.1	Service life– 200 year design life category	<input type="checkbox"/> (2 Electives <sup>a</sup> )	<input type="checkbox"/>



Section	Description	Check the corresponding box to indicate each project elective selected.	Jurisdictional determination of non-availability
508.4.2	Interior adaptability	<input type="checkbox"/>	<input type="checkbox"/>
→			
<b>CH 6. ENERGY CONSERVATION, EFFICIENCY AND EARTH ATMOSPHERIC QUALITY</b>			
613.3	zEPI reduction project electives		
613.3	Project zEPI is at least 5 points lower than required by Table 302.1	<input type="checkbox"/>	<input type="checkbox"/>
613.3	Project zEPI is at least 10 points lower than required by Table 302.1	<input type="checkbox"/> (2 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 15 points lower than required by Table 302.1	<input type="checkbox"/> (3 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 20 points lower than required by Table 302.1	<input type="checkbox"/> (2 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 25 points lower than required by Table 302.1	<input type="checkbox"/> (4 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 30 points lower than required by Table 302.1	<input type="checkbox"/> (5 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 35 points lower than required by Table 302.1	<input type="checkbox"/> (6 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 40 points lower than required by Table 302.1	<input type="checkbox"/> (8 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 45 points lower than required by Table 302.1	<input type="checkbox"/> (9 electives)	<input type="checkbox"/>
613.3	Project zEPI is at least 51 points lower than required by Table 302.1	<input type="checkbox"/> (10 electives)	<input type="checkbox"/>
→			
613.4	Mechanical systems	<input type="checkbox"/>	<input type="checkbox"/>
613.5	Service Water Heating	<input type="checkbox"/>	<input type="checkbox"/>
613.6	Lighting Systems	<input type="checkbox"/>	<input type="checkbox"/>
613.7	Passive design	<input type="checkbox"/>	<input type="checkbox"/>
<b>CH 7. WATER RESOURCE CONSERVATION AND EFFICIENCY</b>			
710.2.1	Fixture flow rates are one tier above that required by Table 302.1	<input type="checkbox"/>	<input type="checkbox"/>
710.2.1	Fixture flow rates are two tiers above that required by Table 302.1.	<input type="checkbox"/> (2 Electives <sup>a</sup> )	<input type="checkbox"/>
710.3	On-site wastewater treatment	<input type="checkbox"/>	<input type="checkbox"/>
710.4	Non-potable outdoor water supply	<input type="checkbox"/>	<input type="checkbox"/>
710.5	Non-potable water for plumbing fixture flushing	<input type="checkbox"/>	<input type="checkbox"/>
710.6	Automatic fire sprinkler system	<input type="checkbox"/>	<input type="checkbox"/>
710.7	Non-potable water supply to fire pumps	<input type="checkbox"/>	<input type="checkbox"/>
710.8	Non-potable water for industrial process makeup water	<input type="checkbox"/>	<input type="checkbox"/>
710.9	Efficient hot water distribution system	<input type="checkbox"/>	<input type="checkbox"/>
710.10	Non-potable water for cooling tower makeup water	<input type="checkbox"/>	
710.11	Graywater collection	<input type="checkbox"/>	<input type="checkbox"/>

Section	Description	Check the corresponding box to indicate each project elective selected.	Jurisdictional determination of non-availability
<b>CH 8 INDOOR ENVIRONMENTAL QUALITY AND COMFORT</b>			
809.2.1	VOC emissions - flooring	<input type="checkbox"/>	<input type="checkbox"/>
809.2.2	VOC emissions – ceiling systems	<input type="checkbox"/>	<input type="checkbox"/>
809.2.3	VOC emissions- wall systems	<input type="checkbox"/>	<input type="checkbox"/>
809.2.4	Total VOC limit	<input type="checkbox"/>	<input type="checkbox"/>
809.3	Views to building exterior	<input type="checkbox"/>	<input type="checkbox"/>
809.4	Interior plant density	<input type="checkbox"/>	<input type="checkbox"/>

a. Where multiple electives are shown in the table in the form "(x electives)", "x" indicates the number of credits to be applied for that elective to the total number of *project electives* required by the jurisdiction as shown in Section 302.1(3) of Table 302.1.

## SECTION 304 WHOLE BUILDING LIFE CYCLE ASSESSMENT

**304.1 Whole building life cycle assessment project elective.** A whole *building life cycle assessment* shall be a *project elective*. The requirements for the execution of a whole *building life cycle assessment* shall be performed in accordance with the following: The data and final report shall be included in the owner education manual required by Section 904.4.

1. The assessment shall demonstrate that the *building* project achieves not less than a 20 percent improvement in environmental performance for each of at least three of the following impact measures, one of which shall be *global warming potential*, as compared to a reference *building* of similar useable floor area, function and configuration that meets the minimum energy requirements of this code and the structural requirements of the *International Building Code*:
  - 1.1 *Primary energy use*
  - 1.2 *Global warming potential*
  - 1.3 *Acidification potential*
  - 1.4 *Eutrophication potential*
  - 1.5 *Ozone depletion potential*
  - 1.6 *Smog potential*
2. The reference and project *buildings* shall utilize the same *life cycle assessment tool*.
3. The *life cycle assessment tool* shall be approved by the code official.
4. *Building operational energy* shall be included.
5. *Building process loads* shall be permitted to be included.
6. The *reference service life* of the reference *building* shall be in accordance with Section 505.1.
7. Maintenance and replacement schedules and actions for components shall be included in the assessment.
8. The full life cycle, from resource extraction to demolition and disposal, including but not limited to, on-site construction, maintenance and replacement, and material and product embodied acquisition, process and transportation energy, shall be assessed.

**Exception:** Electrical and mechanical equipment and controls, plumbing products, fire detection and alarm systems, elevators and conveying systems shall not be included in the assessment.

9. The complete *building* envelope, structural elements, inclusive of footings and foundations, and interior walls, floors and ceilings, including interior and exterior finishes, shall be assessed to the extent that data is available for the materials being analyzed in the selected *life cycle assessment* tool.
10. Mechanical, electrical and plumbing components and specialty items shall not be included in this calculation.
11. The *life cycle assessment* shall conform with the requirements of ISO 14044.



**KAYENTA TOWNSHIP**  
**BUILDING & SAFETY DEPARTMENT**  
**P.O. BOX 1490**  
**KAYENTA, ARIZONA 86033**  
**PHONE: (928) 697-8451      FAX: (928) 697-8461**

February 4, 2011

**Timeline of Events:**

- 10/08/2010 – The week of October 4<sup>th</sup> I attended the Arizona Building Officials (AZBO) education week in Phoenix. One of the classes I participated in was about the International Green Construction Code (IGCC). The session was facilitated by Allan Bilka; Sr. Staff Architect with the International Code Council (ICC). At the conclusion of this session I started the steps needed toward establishing a Green Building Program for the Kayenta Township.
- 10/11/2010 –Email received with some literature from Mr. Bilka on the ICC's support of communities developing green building codes.
- 10/21/2010 –Email received from Sarah Olsen (HUD) offering support from her staff with development of the IGCC for Kayenta. Sarah was a contact person Mr. Waetermans established.
- 11/11/2010 – Arrowhead Engineering asked to incorporate green building concepts into the Zoning Ordinance they are establishing.
- 11/16/2010 – Drafts of Chapter 3; Jurisdictional Requirements and Projects Electives begin.
- 11/22/2010 – Email received from Michelle Baker (EPA Region 9) offering support from her staff along with consultants contracted by the EPA.
- Public Notice of adopting the 2010 IGCC are posted at the Post Office, Chapter House, 7-11 store, and inside the Town Hall lobby.
- 11/30/2010 – Conference call between Philbert Tso, Michelle Baker (EPA), Timonie Hood (EPA), David Eisenburg (Contractor), Anthony Novelli (Contractor), and Merwin Yellowhair (Arrowhead Engineering). This meeting determined to what extent people involved may commit their time to this endeavor. I took the responsibility of drafting jurisdictional requirements and project electives. The other individuals would assist with review and comments.
- 12/01/2010 – Completed draft of Chapter three (3) requirements of the IGCC distributed among parties assisting with development.
- 12/13/2010 – Final comments from David Eisenburg received along with new documents concerning version 2.0. Draft from 12/1/10 remains unchanged, and determined suitable for this region. IGCC Chapter three (3) requirements are filed by the Building & Safety Department.



**KAYENTA TOWNSHIP  
BUILDING & SAFETY DEPARTMENT  
P.O. BOX 1490  
KAYENTA, ARIZONA 86033  
PHONE: (928) 697-8451**

**FAX: (928) 697-8461**

November 23, 2010

# **PUBLIC NOTICE**

The Kayenta Township Commission (KTC) has the authority and responsibility to govern for the welfare of the Kayenta Township (Township) and its residents, including the enactment of such ordinances, rules, and regulations as it deems in the best interest of the Township; and

Notice is hereby given; the Kayenta Township Building & Safety Department will be adopting the 2010 International Green Construction Code (IGCC) Public Version 1.0 on a voluntary basis. When development of the 2010 IGCC Public Version 2.0 is complete it will replace Public Version 1.0. The IGCC is intended to safeguard the environment, public health, safety, and general welfare of the community. Questions that concern this 30 day Public Notice period can be directed to Philbert Tso, Building Official at (928) 697-8451 ext. 233 or email: [ptso@kayentatownship.net](mailto:ptso@kayentatownship.net).

## 2011 IGCC CODE DEVELOPMENT SCHEDULE


STEP IN CODE DEVELOPMENT CYCLE	DATE
2010 PUBLIC COMMENT HEARING ON COMMENTS SUBMITTED TO IGCC PUBLIC VERSION 1.0	August 14 – 22, 2010 The Westin O'Hare Hotel Rosemont, IL
DEADLINE FOR RECEIPT OF APPLICATIONS FOR THE 2011 IGCC CODE COMMITTEE (1)	October 1, 2010
WEB POSTING OF IGCC PUBLIC VERSION 2.0	November 3, 2010
DEADLINE FOR RECEIPT OF CODE CHANGE PROPOSALS TO IGCC PUBLIC VERSION 2.0	January 3, 2011
WEB POSTING OF "PROPOSED CHANGES TO IGCC PV 2.0"	March 25, 2011
DISTRIBUTION DATE OF "PROPOSED CHANGES TO IGCC PV 2.0" (CD distribution only)	April 25, 2011
IGCC CODE DEVELOPMENT HEARING (CDH)	May 16 – 22, 2011 Sheraton Dallas Hotel Dallas, TX
WEB POSTING OF "REPORT OF THE PUBLIC HEARING"	June 27, 2011
DISTRIBUTION DATE OF "REPORT OF THE PUBLIC HEARING" (CD distribution only)	July 25, 2011
DEADLINE FOR RECEIPT OF PUBLIC COMMENTS	August 12, 2011
WEB POSTING OF PUBLIC COMMENTS "FINAL ACTION AGENDA"	September 16, 2011
DISTRIBUTION DATE OF PUBLIC COMMENTS "FINAL ACTION AGENDA" (CD distribution only)	October 14, 2011
FINAL ACTION HEARINGS (FAH)	November 2 – 6, 2011
ANNUAL CONFERENCES	October 25 – 31, 2010 Charlotte Convention Center Charlotte, NC  October 30 – November 3, 2011 Phoenix Convention Center Phoenix, AZ
PUBLISH 2012 IGCC	March/2012

A MEMBER OF THE INTERNATIONAL CODE FAMILY®



# INTERNATIONAL GREEN CONSTRUCTION CODE™

PUBLIC VERSION 2.0, NOVEMBER 2010

 **ASHRAE/USGBC/IES STANDARD 189.1-2009  
STANDARD FOR THE DESIGN OF HIGH-PERFORMANCE GREEN BUILDINGS -  
A JURISDICTIONAL COMPLIANCE OPTION OF THE IGCC**

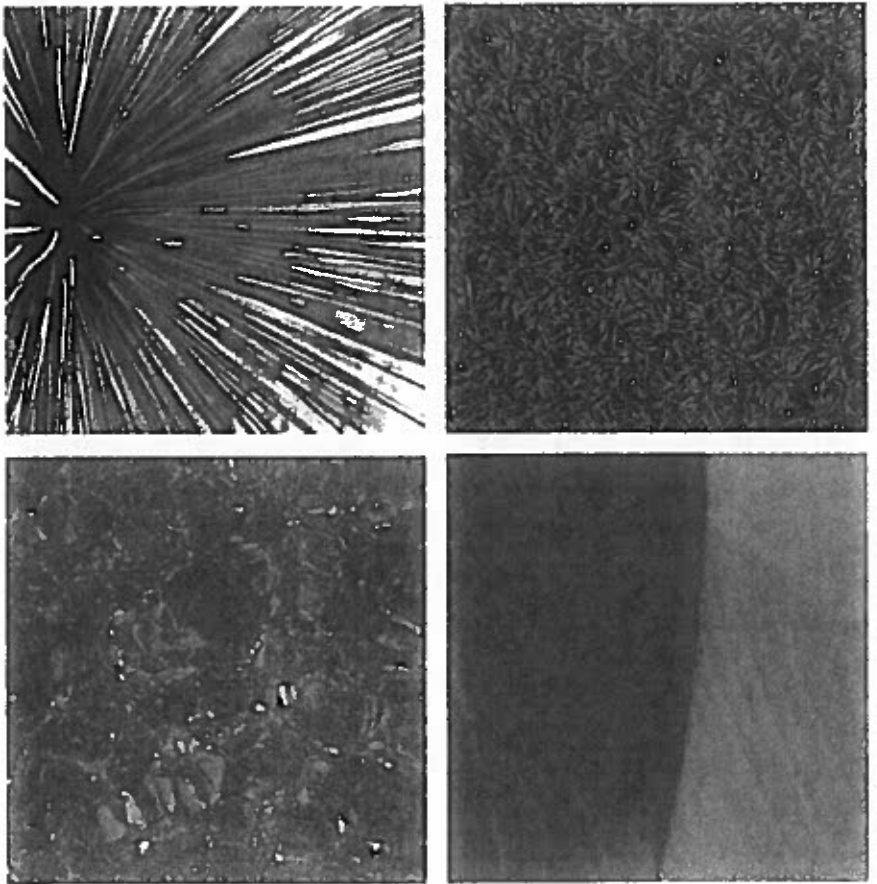


**THE AMERICAN  
INSTITUTE  
OF ARCHITECTS**





# International Green Construction Code Public Version 2.0 Snapshot



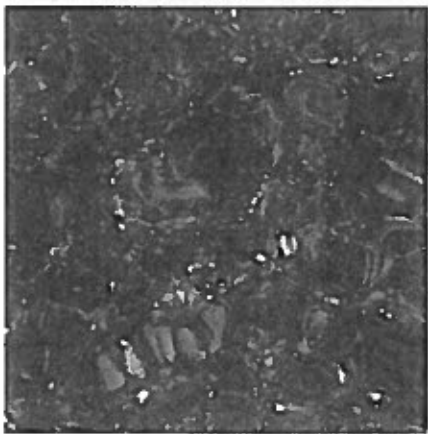
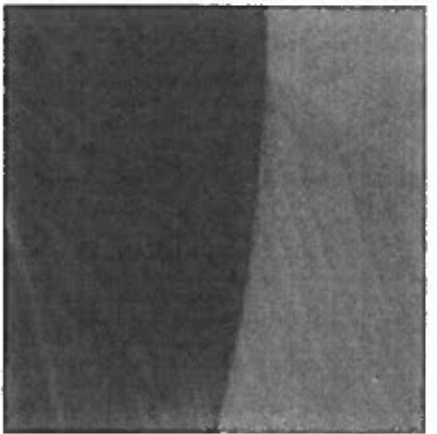
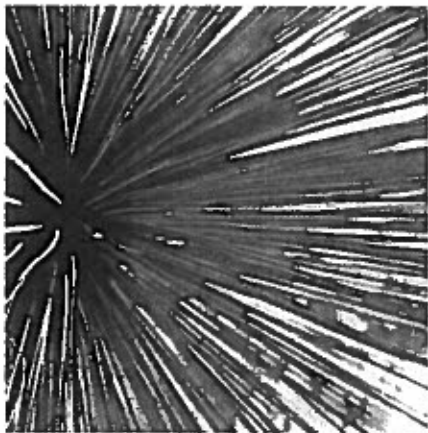
SAFE & SUSTAINABLE BY THE BOOK  
INTERNATIONAL GREEN CONSTRUCTION CODE COUNCIL





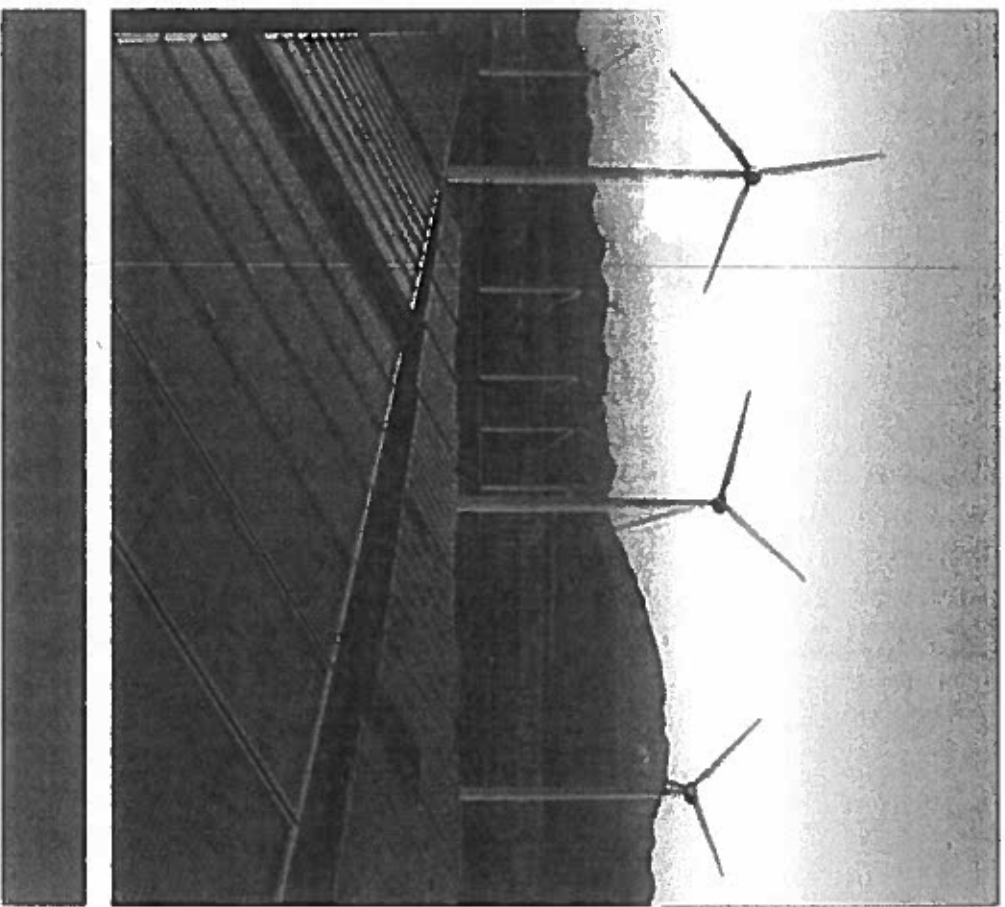


# International Green Construction Code Public Version 2.0 Snapshot



# What is the IGCC?

- An Adoptable, Useable and Enforceable code intended to reduce the negative impacts of the built environment on the natural environment by addressing:
  - Conservation of:
    - Natural resources
    - Materials
    - Energy
    - Water
  - Air & indoor environmental quality
  - Owner education



# Developed By:

- ICC developed by ICC in association with cooperating sponsors:

- ✓ ASTM and

- ✓ AIA

- References **ICC 700** for *residential structures*, as developed by:

- ✓ NAHB and partner

- ✓ ICC

- References **ASHRAE 189.1** as an *alternative compliance path*, as developed by:

- ✓ ASHRAE and partners

- ✓ IES and

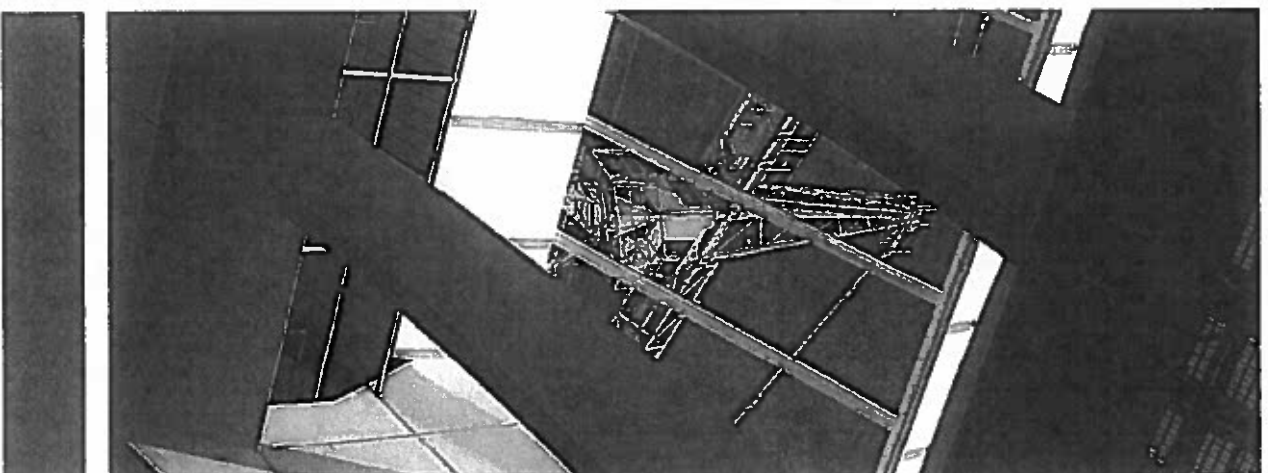
- ✓ USGBC



SAFE & SUSTAINABLE BY THE BOOK  
CONSTRUCTION WITH A PLAN

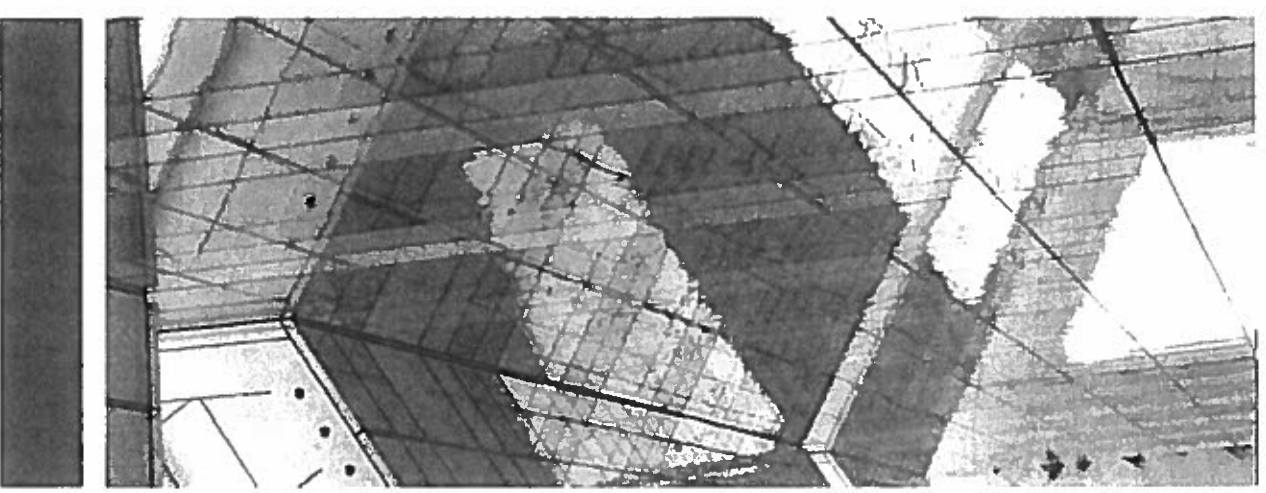
# Scope and Intent

- Consistent and coordinated with the ICC family of Codes & Standards
- Applicable to the construction of
  - New and existing buildings
  - All occupancies
- Intended to be enforced primarily by building officials – a system already in place nation wide
- Intended to drive green building into everyday practice



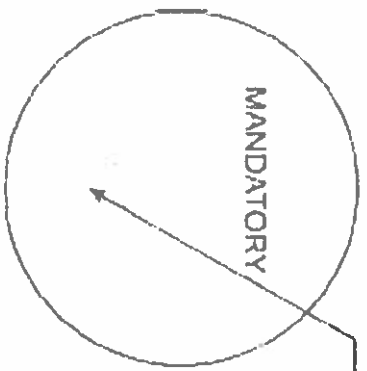
# IGCC Context

- The IGCC is *not* a rating system, nor is it intended to replace them.
- The IGCC is code which is intended to be adopted on mandatory basis.
- Unlike most rating systems, the IGCC primarily consists of minimum mandatory requirements, just as other I-Codes.
- Because it is intended to apply to both private sector and government owned buildings on a mandatory basis – raises the floor of sustainability for all buildings - the IGCC is poised to achieve massive environmental benefits not possible with voluntary green building rating systems.



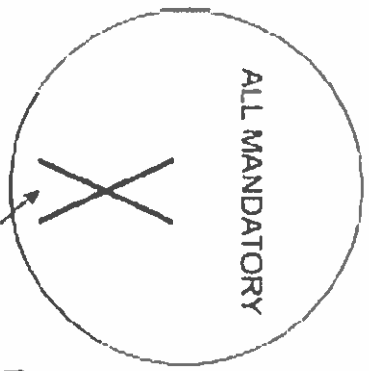
IGCC

ICC 700

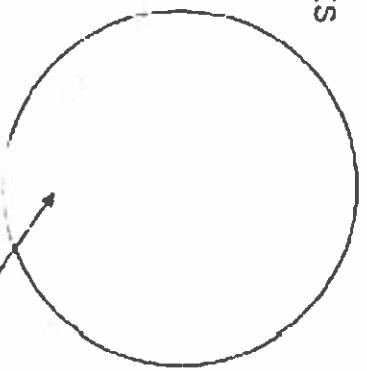


PROJECT ELECTIVES

ASHRAE 90.1

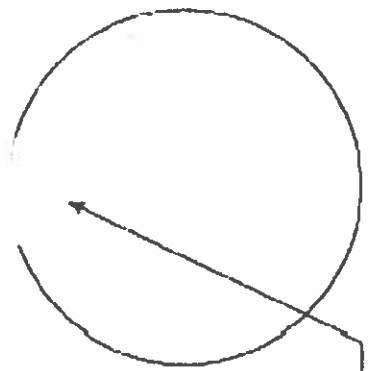


NO PROJECT ELECTIVES  
NO SUCH VEHICLE



MANDATORY

LEED-NC



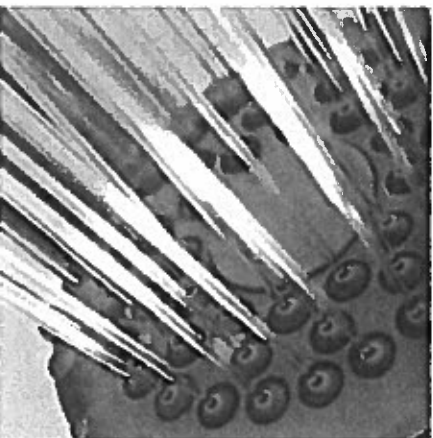
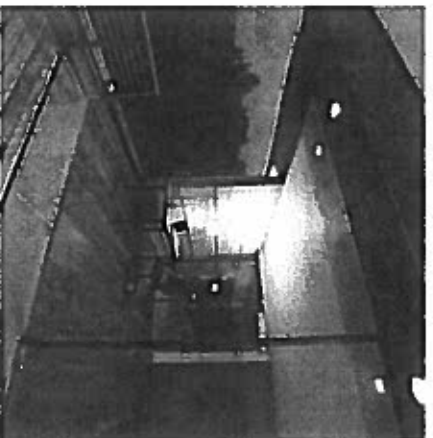
MANDATORY

## *How should we compare green and sustainable codes, standards, rating systems and programs?*

- Building by building? (And using what measuring tool?)
- Or by their ability to be adopted on a mandatory (not voluntary!) basis in all regions and their potential overall reduction of negative environmental impacts?

## *What should the intent of a green code or program be?*

- To make a few buildings very green?
- Or to have as little negative impact as possible on the U.S. and the planets total built and natural environments?





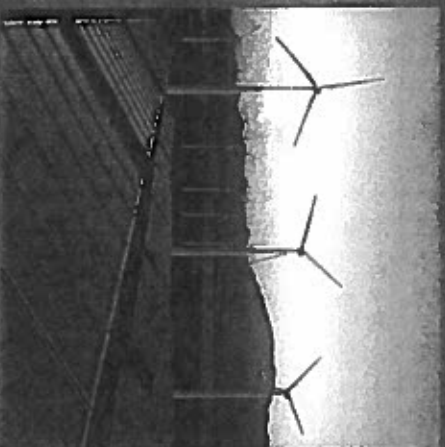


Other Unique Aspects of the IGCC



# Chapter 3: Jurisdictional & Owner Choices

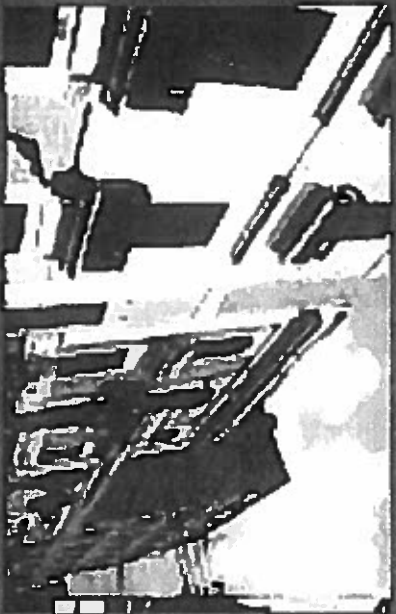
- Focus is on adoptability through flexibility of the document to coordinate with the local jurisdictions environmental goals and specific regional geography.
- Four (4) major parts:
  1. Level of stringency for ICC 700 (Residential occupancies)
  2. Option to adopt ASHRAE Standard 189.1 (Replaces ICC Chapters 4 through 12)
  3. Jurisdictional Requirements. (Chosen by jurisdiction from Table 302.1 and then apply to all buildings built in the jurisdiction. Allows for regional differences in geography and environmental goals.)
  4. Project Electives. (Chosen by the owner and vary from project to project. Encourages higher performance and practices which are impossible to mandate.)



## Chapter 6

# *Conservation, Efficiency and Atmospheric Quality*

- **Approximate minimum performance:**
  - Similar to LEED 2009 (ASHRAE 90.1-2010 + 10%)
- **Compliance paths:**
  - **Prescriptive based,**
  - **Performance based, or**
  - **Outcome based**
    - Estimated energy use relative to actual energy use, based on a 12 month period after commissioning.



## Chapter 10

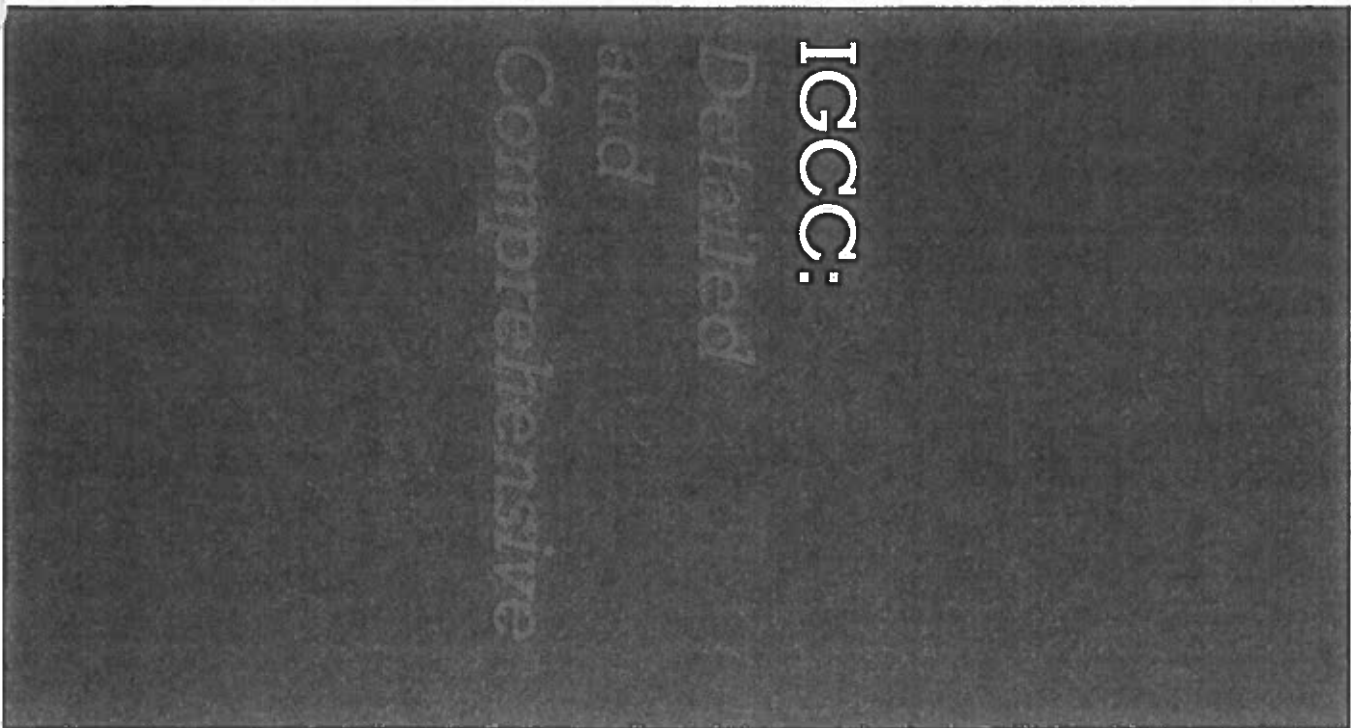
### Existing Buildings

- ✓ Loosely based on the provisions of the IBC for existing buildings:
  - Whatever is changed or added must meet current IGCC requirements.
  - *Unaltered components* can remain as they are.
- ✓ Alterations to Existing Buildings:
  - **Basic prescriptive requirements addressing:**
    - **Leaks**
    - **Defective equipment and systems**
    - **Extensive prescriptive list limited to 10% of the cost of alterations.**

# IGCC:

*Detailed*

*and Comprehensive*



- Contains, doesn't just reference, many detailed useable and enforceable requirements, including:
  - Gray water system details
  - Irrigation system details
  - Rainwater catchment system details
  - Actual energy provisions

