

City of Scottsdale  
**2012 International Green Construction Code**  
Changes and Amendments

September 12, 2012

**INTERNATIONAL GREEN CONSTRUCTION CODE (IgCC)**

The 2012 International Green Construction Code (IgCC) is a new commercial building code developed by the International Code Council (ICC). It is designed as an overlay code that interfaces with the existing body of building codes including the International Building Code (IBC), International Energy Conservation Code (IECC), International Mechanical Code (IMC) and International Plumbing Code (IPC).

The IgCC is not a green rating checklist that award points like LEED and other green building rating programs. The IgCC establishes minimum baseline performance measures in the areas of site sustainability, energy efficiency, water conservation, material resource conservation and indoor environmental quality. Through the use of baseline measures, the IGCC strives to achieve a balance between safety and sustainability. While LEED advances building design to higher levels of environmental performance, the IgCC set baseline parameters for environmental building performance.

In July 2011, Scottsdale adopted a draft version of the IgCC as a voluntary code to replace the city's established Commercial Green Building Program. Under the draft version, two commercial projects have been certified with two other projects underway. The new 2012 IgCC has been updated to be more compatible with mainstream construction practices. By adopting the 2012 edition, Scottsdale will be able to achieve greater participation from the development community while making a significant advancement towards an environmentally sensitive, resource efficient and healthy built environment.

Scottsdale will continue to issue a "Green" Certificate of Occupancy for developments that successfully meet the code's criteria. This "Green" Certificate of Occupancy is recognized by local realtors and adds value to the resale of property. Scottsdale staff believes that with the IgCC certification program, developers will be able to choose to build green in a streamlined process and be recognized for their efforts in designing and constructing high performance and environmentally responsible buildings.

Scottsdale's Green Home Program is planned to be updated based on the 2012 edition of ICC 700 (residential green building standard) pending release in late 2012.

**Major Changes from IgCC Public Version 2.0 to 2012 IgCC**

- Chapter 1 - Scope and Administration
  - Alternative paths of compliance for commercial and residential buildings
- Chapter 2 - Definitions
  - No effect on Scottsdale amended requirements
- Chapter 3 - Jurisdiction Requirements
  - Project electives moved to an appendix chapter
- Chapter 4 – Site development and Land Use
  - No effect on Scottsdale amended sections

- Chapter 5 – Material Resource Conservation and Efficiency
  - Updated moisture control requirements
  - Building service life plan moved to Appendix chapter as project elective
  - Strawbale construction section deleted
- Chapter 6 – Energy Conservation, Efficiency and CO<sub>2</sub>e Emission Reduction
  - Deleted “outcome-based” and “energy use intensity” performance paths
  - Deleted requirement for rough-ins for future solar water heating system
  - Deleted efficiency requirements for portable appliances and equipment
- Chapter 7 – Water Resource Conservation, Quality and Efficiency
  - New prescriptive water fixture efficiency requirements (max. flow and flush rates)
  - Deleted the performance approach for water use reduction
  - Deleted requirements for spa and pool vapor-retardant covers and splash troughs that discharge to pool water system
  - New efficiency requirements for evaporative cooling systems
  - New section on “alternative on-site nonpotable water sources” other than rainwater and graywater
- Chapter 8 – Indoor Environmental Quality and Comfort
  - New optional jurisdictional requirement for indoor air quality testing
  - Deleted radon gas mitigation section
  - Deleted “building ventilation flush out” requirement
  - Deleted building “entry mat system” requirement
  - New prohibition of “urea-formaldehyde foam insulation”
  - Deleted “exterior sound transmission” requirements
- Chapter 9 – Commissioning, Operations and Maintenance
  - Deleted “building owner education manual” requirement
- Chapter 10 – Existing Buildings
  - Deleted requirement for buildings being sold to have an “energy audit and recommended improvements”
  - New “post certificate of occupancy energy performance and emissions” reporting requirement

### **Scottsdale 2012 IgCC Amendments**

- Chapter 1 - Scope and Administration
  - exception for projects that elect not to comply with the IgCC during the building permit application period (maintains code as voluntary except for projects stipulated for compliance during the planning entitlement process) (Sec. 101.3)
  - delete R-2 and R-4 exception for residential buildings complying with ICC 700 (residential green building standard) that are over four stories or mixed use (Sec. 101.3.3)
  - others changes to align with Scottsdale’s IBC administrative chapter
- Chapter 2 - Definitions
  - No new additions
- Chapter 3 - Jurisdiction Requirements
  - Jurisdictional Selections (Table 302.1):
    - preferred parking for low-emission, hybrid and electric vehicles
    - sound transmission levels that separate Group A and F occupancies from Group R, B, M or I occupancies

- IgCC evaluation of existing buildings when covered by a permit
- Chapter 4 – Site development and Land Use
  - Amended sections to reference Scottsdale’s ordinances and design standards for zoning, environmental sensitive lands, floodplain, stormwater, native plants, landscaping and site lighting
- Chapter 5 – Material Resource Conservation and Efficiency
  - Lowered construction waste diversion rate from 50% to 35% based on condition of local construction waste recycling market (Sec. 503.1)
- Chapter 6 – Energy Conservation, Efficiency and CO<sub>2</sub>e Emission Reduction
  - Deleted requirement for “Energy Display” based on recommendation from the Scottsdale Building Advisory Board of Appeals (Sec. 603.6)
  - Deleted requirement for “Automated Demand-Response Infrastructure” based on input from the Scottsdale Building Advisory Board of Appeals (Sec. 604)
  - Amended option for “Permanent Shading Devices” to account for architectural shading devices other than roof overhangs (Sec. 605.1.1.1)
  - Deleted “air curtain” requirement for vestibules based on climate zone 2B (Sec. 605.1.2.3)
  - Deleted “Snowmelt System” provisions based on climate zone 2B (Sec. 607.4)
  - Amended “exterior lighting controls” to reference the Scottsdale energy code (IECC) and site lighting ordinance (Sec. 608.4)
  - Deleted “Plug Load Control” requirements because of restrictive limits on electrical receptacle for computers, water dispensers, refrigerators, audio/visual equipment and furniture systems (Sec. 608.6)
  - Deleted “60 day” time limit requirement for mechanical systems commissioning because building system commissioning is addressed in chapter 9 (Sec.611.1)
- Chapter 7 – Water Resource Conservation, Quality and Efficiency
  - Deleted “Municipal Reclaimed Water” requirement for supply to toilets, urinals, trap primers (Sec. 702.7)
- Chapter 8 – Indoor Environmental Quality and Comfort
  - Amended “Fireplaces and Appliances” requirements to reference Scottsdale amended International Mechanical Code (Sec. 804.1)
  - Deleted “indoor air quality” testing requirements (Sec. 804.2)
- Chapter 9 – Commissioning, Operations and Maintenance
  - Amended time limitation for “Post-Occupancy Commissioning Report” requirement from 30 to 12 months to allow time for corrective measures under the AZ Registrar of Contractor’s 24 month warranty period. Amendment also deletes the need for building official to receive copy of post-occupancy report. (Sec. 903.1.2)
  - Table 903.1 (Commissioning Plan) is amended to account for Scottsdale’s green building plan review and inspection process
- Chapter 10 – Existing Buildings
  - Deleted “Post Certificate of Occupancy Energy and Emissions” Reporting requirement” (Sec. 1007.3)
- Chapter 11 – Existing Building Site Development
  - Deleted entire Chapter 11 because existing city zoning and planning regulations takes precedent