

## International Green Construction Code – Overview Part I

### Overview

The International Green Construction Code™ (IgCC™) is published by International Code Council (ICC). It is a model code that provides minimum requirements to safeguard the environment, public health, safety and general welfare through the establishment of requirements that are intended to reduce the negative impacts of the built environment on the natural environment and building occupants and increase the positive impacts. IgCC is compatible with other family of ICC codes.

### Applicability

The IgCC applies to all occupancies other than temporary structures approved under Section 3103 of the International Building Code; Local jurisdictions may elect to apply requirements of this code to the following occupancies: One and two family dwellings and townhouses that are within the scope of the International Residential Code; Group R-3 occupancies; and Group R-2 and R-4 residential occupancies that are four stories or less in height.

### Chapters and Appendices

There are 12 chapters and 4 appendices in IgCC. Salient points of chapters 1-7 are provided below. Part II will address other chapters.

**Chapter 1** - Scope and Administration: Establishes the limits of applicability of the code and describes the manner in which the code is to be applied and enforced.

**Chapter 2** - Definitions: All terms that are defined in the code are listed alphabetically.

**Chapter 3** - Jurisdictional Requirements and Life Cycle Assessment: The jurisdictional requirements provide the flexibility to adapt the code in a manner that is best suited to meet their unique environmental and regional goals and needs. Local jurisdictions can decide if enhanced provisions should be adopted.

**Chapter 4** - Site Development and Land Use: Intended to minimize the negative environmental impacts on building sites and protect, restore and enhance the natural features and environmental quality of sites. This chapter

- Requires predesign site inventory and assessment.
- Limits building construction near surface water, in conservation and flood hazard areas and on greenfield sites, park land or agricultural land.
- Requires storm water management. Limits potable water uses related to landscape irrigation and outdoor fountains.
- Requires a plan to be developed to ensure that least 75 percent of land-clearing debris and excavated soils are diverted from disposal.
- Requires that at least one walkway or bicycle path connect building entrances to streets or other paths. Requires preferred parking for high-occupancy and low-emission, hybrid and electric vehicles.

**Chapter 5** - Material Resource Conservation and Efficiency: Addresses material resource conservation and efficiency by means of provisions related to material selection, recycling, reuse, renewability, toxicity and durability, including resistance to damage caused by moisture. This chapter

- Requires that a construction material and waste management plan be prepared and allows the jurisdiction to increase the percentage of waste that must be recycled.
- Requires areas be designed and constructed to facilitate the recycling of waste generated post certificate of occupancy.
- Requires at least 55 percent of constructed materials selected for each project be any combination of the following material types: used, recycled, recyclable, bio-based, or indigenous.

**Chapter 6** - Energy Conservation, Efficiency and CO2 Emission Reduction: Intended to provide flexibility and permit the use of innovative approaches to achieve the effective use of energy. Few requirements are as follows:

- All buildings that consume energy are required to comply with Energy Metering, Monitoring and Reporting requirements.
- Requirement for specific appliances and equipment, building renewable energy systems and commissioning.
- Requirements vary for buildings designed on a performance basis versus prescriptive basis.
- Requirement for insulation and fenestration to exceed requirement of International Energy Conservation code by at least 10%.
- 2% total calculated energy use by solar photovoltaic or wind or 10% annual estimated hot water energy by means of solar hot water heating.
- Requires commissioning for mechanical, lighting, electrical and building envelope systems.
- Allows jurisdictions to require lower zero Energy Performance Index values, or require more stringent levels of efficiency, by occupancy.

**Chapter 7** - Water Resource Conservation, Quality and Efficiency: Stipulates requirements that are intended to conserve water, protect water quality and provide for safe water consumption. This Chapter

- Regulates water consumption through limitations of fixture and fitting flow rates and by means of requirements related to specific equipment and appliances.
- Regulates water used in HVAC systems and equipment, water treatment devices and equipment.
- Specific water conservation measures for indoor ornamental fountains and other water features. Requires separate metering of water consumed from any source associated with the building or its site.
- Signage and water quality requirements related to nonpotable water. Requirements related to rainwater collection and distribution systems, gray water systems, and reclaimed water systems.

Reference: <http://www.iccsafe.org/cs/igcc/pages/default.aspx>

