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SYNOPSIS

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



INTERNATIONAL GREEN CONSTRUCTION CODE® (IGCC®)

SYNOPSIS

(Based on Public Version 1.0 of the IGCC)

OVERVIEW/BACKGROUND

The International Green Construction Code (IGCC) provides a comprehensive set of requirements intended to reduce the negative impact of buildings on the natural environment. It is a document which can be readily used by manufacturers, design professionals and contractors; but what sets it apart in the world of green building is that it was created with the intent to be administered by code officials and adopted by governmental units at any level as a tool to drive green building beyond the market segment that has been transformed by *voluntary* rating systems. It has been developed by the International Code Council (ICC) in association with cooperating sponsors ASTM International (ASTM) and the American Institute of Architects (AIA). Other organizations indicating their support include the U.S. Green Building Council (USGBC), producers of the LEED green building rating systems, and The Green Building Initiative (The GBI), producers of the Green Globes green building rating system.

The IGCC was developed with the intent to be consistent and coordinated with the ICC family of Codes & Standards: the I-Codes. It is applicable to the construction of high performance commercial buildings, structures, and systems, including existing buildings subject to alterations and additions, utilizing both traditional and innovative construction practices. Residential occupancies are covered by reference to the ICC 700 National Green Building Standard (NGBS). High-rise residential buildings, however, may conform to either the IGCC or ICC 700. The IGCC also allows jurisdictions to choose ANSI/ASHRAE/USGBC IES Standard 189.1 as jurisdictional compliance option. ASHRAE Standard 189.1, Standard for High-Performance Green Buildings Except Low-Rise Residential Buildings, is an American National Standards Institute (ANSI) standard developed by the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) in association with the Illuminating Engineering Society (IES) and the U.S. Green Building Council (USGBC).

Because it was written in *mandatory* language, the IGCC is poised to produce environmental benefits on a massive scale: a scale impossible to attain with purely *voluntary* green building programs and rating systems. *Voluntary* programs have pioneered the Green movement, and with the foundation they have laid, the IGCC is positioned to achieve significant market transformation in those segments that are not likely to react to voluntary programs.

The IGCC is not a rating system; however, it incorporates an innovative new concept, that of *project electives*, which is designed to encourage and drive the construction of buildings which exceed the already stringent minimum requirements of the code, much like rating systems do. In addition, it contains other innovative features which allow jurisdictions to customize and tailor the code to address environmental concerns of a local nature and to respond to environmentally related political agendas.

Often, even at their higher performance thresholds, most green and sustainable building rating systems offer many choices to the owner and designer, but do not *require* increased performance in those specific areas which the jurisdiction may feel are critical. The IGCC, however, provides jurisdictions with a document which allows them to specify enhanced building performance in many specific critical areas of concern, including energy, water, natural resource and material conservation, etc. Rather than relying on an overall score attained by allowing owners and

design professionals to choose from a wide array of choices in all environmental categories with few mandatory requirements, as is typical of most green building rating systems, the IGCC takes the opposite approach: the IGCC is composed primarily of mandatory requirements, a number of which the jurisdiction selects for local enforcement, including specific requirements in each environmental category, and a relatively small number of owner/designer choices. The IGCC regulates owner/designer choices as *project electives*. A minimum number of *project electives*, as determined by the jurisdiction for all projects, must be chosen by the owner or design professional for implementation on each specific project. As a result of these features, the IGCC is able to produce more predictable results which are closely aligned with each jurisdiction's specific environmental goals. And even if a jurisdiction chooses to enforce only the minimum criteria in the IGCC, because the IGCC is intended to be adopted as a mandatory document, it is still poised to significantly reduce the impact of the built environment on the natural environment.

The IGCC:

- Is applicable to new construction, as well as alterations and additions to existing buildings
- Is written in mandatory language which is coordinated with the family of codes produced by the International Code Council
- Is intended to be adopted by jurisdictions on a *mandatory* basis
- Is intended to be administered primarily by building officials
- Sets stringent minimum mandatory requirements and performance thresholds in many specific areas, some of which are determined by the jurisdiction
- Is intended to be useable by manufacturers, design professionals and contractors
- Is intended to be adopted by governmental units and administered by building departments
- Is applicable to all commercial occupancies
- References ICC 700 for residential occupancies, except that high-rise residential occupancies may be regulated by either ICC 700 or the IGCC
- Incorporates features which allow jurisdictions to customize requirements to suit local geographical conditions and environmental priorities and agendas
- Incorporates a relatively small number of “project electives”, a minimum number of which must be selected by the owner or design professional and implemented on each project, as a means to:
 - Encourage practices which are difficult to mandate; and
 - Encourage higher performance buildings (buildings with lower environmental impact which exceed the minimum requirements of the IGCC)
- Is *not* a rating system and is *not* intended to provide a single metric indicative of overall building performance
- In a single code or volume, is applicable to new construction, existing construction, building shells, multiple occupancy classifications, building shells and community development, etc.

