BUILDING GREEN

was once thought to be the elite way to construct a new structure.

Today it is the *standard for environmental and safe* building.

ICC – leading the way in supporting green codes and standards for resilient, sustainable and affordable building practices.
With the challenges to our environment and the movement to use resources more efficiently — International Code Council (ICC) is dedicated to developing model codes and standards, and is the leader in a Family of Companies that are in the forefront of sustainable and green construction.
Green and Sustainable Codes & Standards —

The Family of International Codes

The ICC publishes the International Codes®, or I-Codes®, a comprehensive and coordinated family of codes that support the construction industry to achieve resiliency, safety, innovation and affordability in the built environment. Among the ICC codes and standards, there are three major green and sustainable building code publications, based on the most current building science:

**International Green Construction Code® (IgCC®)** – This was the first model code to include sustainability measures for an entire construction project and its site—from design, through construction, certificate of occupancy and beyond. The IgCC establishes a baseline for new and existing commercial buildings related to energy conservation, water efficiency, site impacts, building waste, material resource efficiency and other sustainability measures. While establishing minimum green requirements for buildings, the IgCC® also offers flexibility to jurisdictions that adopt the code by establishing several levels of compliance starting with the core provisions of the code, and then offering *jurisdictional requirement* options that can be customized to fit the needs of a local community. The code acts as an overlay to the existing set of International Codes, including provisions of the *International Energy Conservation Code®* and *ICC-700 National Green Building Standard™*, and incorporates ASHRAE Standard 189.1 as an alternate path to compliance. There is also a water efficiency provision extract for those jurisdictions that want to first focus on this aspect of green construction.

**Future of IGCC**

ICC and ASHRAE have signed the final agreement that outlines each organization’s role in the development and maintenance of the new version of the *International Green Construction Code* (IgCC) sponsored by the American Institute of Architects (AIA), ASHRAE, ICC, the Illuminating Engineering Society (IES) and the U.S. Green Building Council (USGBC). The code, scheduled to be released in 2018, will be powered by ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings* developed using the American National Standards Institute (ANSI) approved ASHRAE consensus process. The joint Standing Standards Project Committee 189.1 will serve as the consensus body that will work to ensure the standard is consistent and coordinated with the ICC Family of Codes.

**International Energy Conservation Code® (IECC®)** – Sets minimum energy efficiency provisions for both residential and commercial buildings. The IECC covers new construction, additions, remodeling, window replacement and repairs of specified buildings with each implementing the green construction code that will make a contribution toward a healthier, lower impact and more sustainable building practices. Users of the code can choose between two methods for showing compliance, the prescriptive and performance paths.
ICC700-2012 National Green Building Standard™ –

Provides guidance for safe and sustainable building practices for residential construction, including both new and renovated single-family to high-rise residential buildings. This standard allows builders, designers and communities to choose the levels of high-performance green buildings with the following key provisions:

- Land conservation
- Rainwater collection
- Construction of smaller homes to conserve resources
- Use of low VOC (Volatile Organic Compound) materials, detached garages or carports to improve indoor environmental quality
- Homeowner education on proper maintenance and operation to maintain its green status throughout its life cycle

The standard also promotes homeowner education for the maintenance and operation of green residential buildings in order to ensure long-term benefits.

Green Support Publications and Products

Additional related publications and products that can assist users in applying the codes and standards are:

- **International Green Construction Code Water Efficiency Provisions** – This document consists of provisions extracted directly from the International Green Construction Code™ (IgCC™) and is designed for ease of implementation of its water-related provisions. The IgCC Water Efficiency Provisions document offers one of the most comprehensive model code for constructing and remodeling buildings in order to reduce water consumption. It promotes water conservation associated with both the building and the building site. These provisions address systems and components including, but not limited to: plumbing fixtures and fittings, appliances, hot water delivery systems, meters, cooling towers, water treatment systems, alternate water supplies (including rainwater, gray water, and reclaimed water), landscape irrigation systems and car washes.

- **International Solar Energy Provisions™** – The 2015 International Solar Energy Provisions™ (ISEP™) contains the complete solar-energy-related provisions and selected standards from the 2015 International Codes® (2015 I-Codes) in one document to address the needs of the solar energy industry. The ISEP is organized such that it provides the best and most comprehensive tool for the design, installation and administration of both solar thermal (or solar heating and cooling) and photovoltaic systems.


- **ICC 900/SRCC 300-2015: Solar Thermal System Standard** – This standard establishes minimum criteria for the design and installation of solar thermal systems. It describes the requirements and methodology for solar thermal system design and evaluation.
→ **ICC 901/SRCC 100-2015 Solar Thermal Collector Standard** – This standard establishes minimum criteria for the design, manufacture and testing of solar thermal collectors. It addresses a wide range of solar thermal collectors, including flat panel, evacuated tube, concentrating, integrated storage and unglazed.

→ **Energy Code Essentials, 2015 edition** – Provides an easy-to-read companion guide to the IECC® for both beginning and experienced code users and accurate information on critical energy code applications in the office and in the field for residential and commercial construction.

→ **International Energy Conservation Code Turbo Tabs** – These tabs were created by industry experts who carefully identified the most referenced sections in the code in an easy-to-read format.

→ **Code and Commentaries** – Presented in an easy-to-reference format, the IgCC® and IECC® Code and Commentaries are a comprehensive and convenient reference for regulations in the International Green Construction Code and the International Energy Conservation Code. These publications focus on providing the full meaning and implications of the codes and are designed to suggest the most effective method of application of the code provisions.

→ **ICC G4-2012 Guideline for Commissioning** – Helps the building compliance and design communities to successfully implement the building commissioning process as mandated in the 2012 International Green Construction Code (IgCC) and *International Energy Conservation Code*. The guideline supports the adoption and application of the IgCC and its alternate compliance paths ASHRAE 189.1 and ICC 700-2008 National Green Building Standard, as well as regional green building codes such as CALGreen.

→ **ICC Performance Code for Buildings and Facilities** – Presents users with regulations based on outcome, rather than prescription. This indispensable resource provides a broader parameter for meeting the intent of the International Codes, thereby encouraging new design methods. Promotes innovative, flexible and responsive solutions that optimize the expenditure and consumption of resources while preserving social and economic value.

→ **International Existing Building Code** – Contains requirements intended to encourage the use and reuse of existing buildings. The scope covers repair, alteration, addition and change of occupancy for existing buildings and historic buildings, while achieving appropriate levels of safety without requiring full compliance with the new construction requirements contained in the other I-Codes.

**ICC Education for IgCC and IECC**

Expert training from ICC is available both online and on location and provides CEU credit for renewal of certifications. These programs include:

→ IgCC Fundamentals
→ IECC Significant Changes
→ IECC Performing Residential Energy Inspections
→ IECC Update
→ IECC Performing Residential Energy Plan Reviews
→ IECC Fundamentals

Complete descriptions of education programs are available online at www.iccsafe.org.
ICC Certification Services

The Code Council certification program is the oldest, largest and most prestigious credentialing program for construction code administration and enforcement professionals in the United States. Code Council certification examinations are maintained to the highest standards and include continuous review by committees of experienced professionals. Becoming Code Council-certified is a significant personal and professional accomplishment, and is a key step toward enhanced professional stature.

The Code Council offers these Energy and Green related certifications:

**Energy Conservation Certification**
- Commercial Energy Inspector
- Commercial Energy Plans Examiner
- Residential Energy Inspector/Plans Examiner
- Commercial Energy Inspector/Plans Examiner with ASHRAE 90.1

**Green Building Certification**
- Green Code IgCC Inspector/Plans Examiner with ASHRAE 189.1
- G1 Green Building—Residential Examiner

Complete descriptions of certification programs are available online at [www.iccsafe.org](http://www.iccsafe.org).

**ICC — Additional Green Benefits**

**Online Discussion Boards**
ICC offers online discussion boards through the ICC website for users to discuss questions and issues related to the IECC and IgCC. Go to [www.iccsafe.org/forums](http://www.iccsafe.org/forums).

**Sustainability Membership Council**
Open to all ICC Members who are looking to get more involved in green and energy code enforcement and influence the direction of ICC. An application for membership and more information about the Sustainability Membership Council is available at [www.iccsafe.org](http://www.iccsafe.org).

**The ICC Family of Companies**

There are three ICC subsidiaries that support the green, sustainable and energy fields and are dedicated to the construction of safe, sustainable, affordable and resilient structures:
- ICC Evaluation Service® (ICC-ES®)
- International Accreditation Service® (IAS®)
- Solar Rating & Certification Corporation™ (SRCC™)
ICC-ES is the leader in the technical evaluations of building products, components, methods and materials. In response to the increased demand for the evaluation of “green” building products, ICC-ES developed the Environmental Programs that provides manufacturers with independent and comprehensive evaluation and/or certification for their products that meet specific sustainability targets. ICC-ES offers the following services under the ICC-ES VAR Environmental Report and Environmental Product Declaration (EPD) Programs:

**ICC-ES VAR Environmental Reports** – evaluates products to green building codes such as:
- International Green Construction Code (IgCC)
- California Green Building Standards Code (CALGreen)
- ASHRAE 189.1

**ICC-ES** – evaluates products to green building rating systems and standards such as:
- U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED)
- Green Building Initiative’s GBI-01 Green Building Assessment Protocol for Commercial Buildings Standard
- ICC700-2012 National Green Building Standard

Evaluation of assemblies for compliance with the provisions of the International Energy Conservation Code (IECC), the ICC-ES VAR Environmental Program creates reports that are used by code officials, government agencies, architects, engineers, specifiers and many others as an independent, third-party assessment of a product or assembly.

**ICC-ES EPD Program** – conducts a Type III environmental declaration program that certifies a manufacturer’s EPD as conforming to the requirements of the ISO 14025 Environmental Declaration standard.

**IAS Accreditation Programs**

IAS is a nonprofit, internationally recognized accreditation body which accredits a wide range of companies and organizations whose services may be used by businesses and regulators engaged in providing energy-efficient, sustainable infrastructure.

IAS offers accreditation for the following sustainable, green and environmental programs:
- Testing Laboratory Accreditation
- Inspection Agency Accreditation
- Commissioning Training and Certification Agency Accreditation
- Management System Certification Body Accreditation of Environmental Management Systems
Solar Rating & Certification Corporation (SRCC)
www.solar-rating.org

The only national certification program established solely for solar thermal products. It is also the only national certification organization whose programs are the direct result of the combined efforts of state organizations and an industry association involved in the administration of standards. SRCC will allow manufacturers to get renewable energy products into the marketplace quickly with wide acceptance by code officials who recognize the ICC-ES and SRCC marks. Products are evaluated to the requirements of the Uniform Solar Energy Code, the International Plumbing Code and the International Green Construction Code for solar thermal products and systems that are SRCC certified and rated. SRCC currently maintains three standards in support of its certification, listing and rating programs, including solar thermal collectors (SRCC™ Standard 100), solar water heating systems (SRCC™ Standard 300) and solar thermal concentrating collectors (SRCC™ Standard 600). SRCC listing programs ensure that the products comply with applicable codes and standards.

About ICC
www.iccsafe.org

The International Code Council is a member-focused association. It is dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes.

Our vision: Protect the health, safety and welfare of people by creating safe buildings and communities.

Our mission: To provide the highest quality codes, standards, products and services for all concerned with the safety and performance of the built environment.

For more information visit: www.iccsafe.org / 888-ICC-SAFE (422-7233)