



TECHNICAL BULLETIN
Community Development & Planning, Building Inspections
TOPIC:
The use of IC3 for Demonstrating Energy Code Compliance
May 24, 2012

The City of Arlington accepts the use of International Code Compliance Calculator (IC3) as an option to demonstrate energy code compliance for new 1- & 2-family construction and new multifamily projects 3 stories or less. IC3 is a web-based energy code performance software compliance tool developed by Energy Systems Laboratory of the Texas A&M University System. IC3 provides a computer simulation of the performance of the proposed structure's use of fuel (natural gas or electricity) to heat and cool the home and deliver the necessary hot water on an annual basis.

IC3 will generate a unique compliance certificate stating the percentage of compliance above base code and the emissions reduction resulting from that above code compliance. The software will allow the builder to take credit for the use of radiant barriers, locating the ducts/HVAC equipment in the conditioned space, more efficient HVAC equipment and for the installation of more efficient domestic water heating equipment. The software will allow the user to "trade off" different variables of the thermal envelope, the heating/cooling equipment and domestic water heating equipment for the best realized annual performance.

The IC3 software login page may be found at <http://ic3.tamu.edu/>. This page also contains a link to the instructions manual. The current version of the software is version 3.12.

The use of IC3 to demonstrate energy code compliance in the City of Arlington is subject to the following conditions:

1. The 3-page compliance energy report with signatures must be submitted with the building permit application and standard plan submittals.
2. The report must be signed by a preparer that has one of the listed certifications, with a contact phone number and the certification number. The preparer is expected to be familiar with the software manual.
 - a. ICC Commercial Energy Inspector
 - b. ICC Commercial Energy Plans Examiner
 - c. ICC Residential Energy Inspector/Plans Examiner
 - d. HERS rater
3. The notes field on the Project Information tab must contain the following information, if applicable to the project:
 - a. Indicate weighted values as applicable (wall/ceiling R values, ceiling height, glazing U factors/SHGC, HVAC SEER/HPSF for multiple systems, DHW efficiency ratings for multiple water heaters, etc)
 - b. Any other notes critical to interpreting compliance certificate.

IC3 software limitations:

1. May only be used for new construction, will not simulate additions or remodels unless the entire structure is simulated
2. Limited to conventional wood frame construction.
3. Limited to a maximum of 10,000 square feet per floor (3 stories or less).