TECHNICAL BULLETIN

Community Development & Planning, Building Inspections

TOPIC:

IC3 Accepted as an Option for Demonstrating Energy Code Compliance

Effective immediately, the City of Arlington recognizes the use of International Code Compliance Calculator (IC3) as an option to demonstrate energy code compliance for new 1- & 2-family construction. IC3 is a web-based energy code performance software system 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 that will state 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 use of IC3 to demonstrate energy code compliance in the City of Arlington is subject to the following conditions:

1. The compliance certificate must be submitted with the building permit application and standard plan submittals.
2. The compliance certificate must be signed by a preparer that has one of the listed certifications, with a 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, or
    d. HERS rater.
3. The notes field on the compliance certificate must contain the following information, if applicable:
    a. R8/R6 Duct insulation trade off with increased SEER. Note that the SEER of the equipment entered on the calculator cannot be the higher SEER value.
    b. 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)
    c. 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.
2. May only be used for slab on grade foundations, will not simulate pier and beam foundations.
3. Limited to two story projects, no basements.
4. Limited to 10,000 square feet per floor area.

March 20, 2009