BUILDING ENERGY CODES PROGRAM
Setting the Standard UPDATE
U.S. Department of Energy • Office of Energy Efficiency and Renewable Energy
July 2004 Number 2

Revised International Energy Code: Easier to Use and Enforce

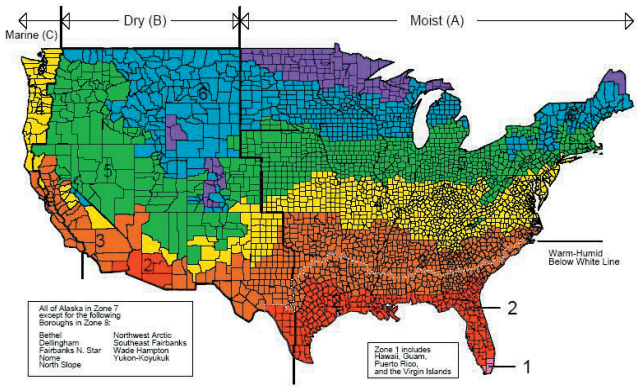
The International Codes Council (ICC) recently approved sweeping changes to the residential chapters of the International Energy Conservation Code (IECC™), the national model code that is the basis for many state energy codes. The revised residential energy code replaces chapters three through six of the previous code. It shrinks the IECC codebook by more than half, resulting is a code that will be easier to read, understand, use and enforce.

The changes will become the *2004 Supplement to the 2003 IECC* and the corresponding energy chapter of the IRC. Highlights of the revisions include:

- **Redefined climate zones**
  The new code defines climate zones geographically rather than climatically, reducing their number to only eight. (The previous code had 19 climate zones defined by degree day ranges.) Compliance and enforcement will be simpler because the new climate zones honor political boundaries, such as state and county lines and attempt to keep metropolitan areas together[1]. The redefined climate zones also do a better job of integrating cooling considerations into the code—a key improvement given that air conditioning is a rapidly growing residential load.

- **Simpler prescriptive requirements**
  Glazing requirements are independent of window area percentage, eliminating the vast majority of calculations needed to show compliance and significantly reducing the time required for plan reviews and inspections. Each climate zone has a single, stricter, U-factor for windows, regardless of glazing percentage.

Some other changes include: limits on window U-factors and SHGC (Solar Heat Gain Coefficient) when trade offs are used in compliance; requirements for sealed air handlers; changes in the locations where vapor barriers are required; and elimination of unused, redundant or conflicting definitions.



The revised IECC simplifies climate zones by consolidating them into eight regions.

Because of the extensive changes, the 2004 Supplement will include a printed copy of the entire IECC, rather than just the changes. The 2004 Supplement can be ordered through the ICC Store at *www.iccsafe.org*.

Building Energy Codes
U.S. Department of Energy

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July 2004
DOE/GO-10099-702