

Integrating Building Performance & Energy Codes ~ The House as a System

(From the ABCs of Energy Efficiency)

OBBS Code Training Course Description: Course # BBS2007-261
Approved for BO, MPE, BI, MI, RBO, RPE, RBI - 8hrs



Introduction:

The ABCs series of workshops are developed as 2hr sessions but can be added or even combined as an 8hr session covering all aspects of Integrating Building Performance and Energy Codes.

The presentation approach incorporates actual buildings through photos and graphics to make the principles come alive for the participants and relate the subject to what they are seeing and experiencing every day. From our statewide audit efforts, I have a library of visuals and experiences assisting builders with unique locally based challenges. I have seen success and failure in the field and can share the lessons learned.

Materials will include session handouts and text materials developed during my training and technical assistance efforts with builders, code officials, and with home energy raters. In addition, I recommend a copy of the EEBA *Builder's Guide* and *Water Management Guide* be made available for each of the workshop attendees. Materials from these excellent resources are used during the course of the presentations. Content may be shifted slightly to highlight specific issues of importance to each group.

Agenda:

Introduction to the Course: (10 minutes)

The instructor will introduce himself and provide an overview of the course, text materials and housekeeping/logistical issues.

Integrating Building Performance & Energy Codes (7 hrs - 50 minutes)

The house as a system

This section will combine elements of the other four sessions and focus on performance issues – do we meet the intent of the code and does the house work?

Session 1: Manage Water – Keeping It Out & Letting It Out (110 minutes)

Bulk Water Management

Surveys drainage plane requirements, capillary breaks, and other strategies to keep bulk water out of building assemblies

Airflow & Vapor Retarder Systems

Examines the hidden means of moisture migration, how to prevent it and how to accommodate it - includes a review of the current move to eliminate vapor barriers in most of our residential construction

Session 2: Insulate the Entire Shell – Attic to Footer (110 minutes)

Insulation – the holy grail of code compliance

Surveys the various required levels of insulation to meet code compliance

Insulation as Properly Installed

Examines the techniques of proper installation to achieve performance

Session 3: Ventilate Right & Make Airtight (110 minutes)

Ventilate Right

Surveys ventilation strategies and the cost of random and of added ventilation

Make Airtight

Examines building tightness limits and failures

Session 4: Code Compliance Models (110 minutes)

RECA Guides – the Prescriptive, one page fits all approach

REScheck™ – the computerized Trade Off Worksheet

Covers the use and misuse of the most popular code compliance tool

REM/Design™ - a performance and shell analysis approach

Provides an introduction to this most detailed residential energy assessment tool

Session outlines follow those for the individual course submissions. The eight hour session could be presented if code organizations wish to accrue eight CEU hours for their members in a single sitting. At 110 minutes, the combined sessions would allow for a 10 minute break every two hours.