



Conquering the Energy Code for Architects and Engineers: Residential

Course Outline

At the end of this course, participants will:

- Understand the structure and rationale behind the energy code
- Be able to differentiate the various compliance pathways and understand the requirements for compliance
- Sharpen communication and coordination practices as related to clients, the design team, code officials and the construction team to remove barriers to compliance
- Understand the interdependence of the building envelope, mechanical and lighting systems and their impacts on energy consumption

And finally, inspire design professionals to build above code minimum.

Please note: any building four or more stories in height must comply with the commercial energy code.

PART 1: OVERVIEW

1. Introduction: Energy Code Basics

- Benefits and Trends
- Basic Parameters

2. Energy Codes are a Systems-Based Approach

- Whole Building Design
- Systems regulated by code:
 - Building Envelope
 - Mechanical and Service Water Heating
 - Electrical Power and Lighting Systems

3. Coordination and Communication

- Team Communication
- Integrated Design Approach

PART 2: RESIDENTIAL ENERGY CODE PROVISIONS

1. Scope and Compliance

- Overview and Definitions
- Selecting Compliance Paths

2. Prescriptive Path

- Building Thermal Envelope
- Systems
- Electric Power and Lighting Systems

- 3. Simulated Performance Alternative**
- 4. Energy Rating Index**
- 5. Existing Buildings**

PART 3: DOCUMENTATION AND INSPECTIONS

- 1. Introduction**
- 2. Compliance**
 - Plan Review & Documentation
 - Supporting Documentation
 - Progress Inspections
- 3. Common Objections**
- 4. Local Laws**
- 5. Resources**