

## INFRARED INSPECTIONS FOR HOME & BUILDING INSPECTORS

### 1. Basic Infrared Theory

- Heat transfer
- Electromagnetic spectrum
- Emittance, reflectance, and transmittance
- Atmospheric transmission
- IR imaging systems and lens materials

### 2. Infrared Equipment

- Selection criteria
- Range and level settings
- Equipment set-up & operation
- Image interpretation & recording
- Equipment care & maintenance

### 3. Infrared Building Inspections

- Theory and component construction
- Insulation and material characteristics
- Inspection techniques
  - interior / exterior
- Weather variables and influences
- Required site conditions
  - creating sufficient Delta T
- Thermal signatures
  - missing & damaged insulation
  - air leakage
  - latent moisture
  - pest damage
- Mold detection
- Inspection of building subsystems
- Other tools
- Verification of data
- Data recording
- Standards for inspections

#### 4. Infrared Roof Inspections

- Theory and component construction
- Insulation and material characteristics
- Inspection techniques
  - ground based / aerial
- Weather variables and influences
- Required site conditions
- Safety practices
- Thermal signatures of latent moisture
- Verification of data
- Data recording
- Alternate methods of moisture detection
- Standards for inspections

#### 5. Infrared Electrical System Inspections

- Theory and thermal signatures of problems
- Seven types of detectable defects
- Conducting an inspection
- Safety practices
- Confirming exceptions
- Data recording
- Standards for inspections

#### 6. Marketing

- How to start / expand an IR consulting business
- Identifying potential markets
- Advertising your services
- Locating qualified prospects
- Attracting repeat business
- Establishing fee structures

