

RESIDENTIAL EFFICIENCY

**APPLICATION OF ENERGY
AUDITS AND RATINGS**

AARON D. DESPRES

HUGH P. SAVAGE

RESIDENTIAL EFFICIENCY

APPLICATION OF ENERGY AUDITS AND RATINGS

Neither this outline nor this course is intended to provide legal advice. Consult your legal counsel or Designated Broker for any areas of concern.

This course has been approved by the Maine Real Estate Commission for three clock hours of continuing education credit for activating or renewing a real estate license in the state of Maine.

COPYRIGHT © 2010 By Aaron D. Despres, Hugh P. Savage and Arthur R. Gary

All rights reserved. No part of this publication may be reproduced without the prior written consent of either Aaron D. Despres, Hugh P. Savage or Arthur R. Gary.

Arthur Gary School Of Real Estate
396 Cumberland Street, Westbrook, ME 04092
Phone: 207-856-1712 Fax: 207-856-9917
email: ArthurGary@ArthurGary.com
web: www.ArthurGary.com

RESIDENTIAL EFFICIENCY

APPLICATION OF ENERGY AUDITS AND RATINGS

GOALS: After completing this course the student will be able to:

- A. Understand the differences between an energy audit and a rating.
- B. Discuss the importance of energy audits and ratings for homeowners and home buyers.
- C. Recognize the importance of training and accreditation for energy auditors and raters.
- D. Become familiar with various equipment used in energy audits.
- E. Discuss the importance of building science in relation to energy audits.
- F. Identify where to focus efforts to increase the efficiency of a building.
- G. Explain possible solutions to common problems found during an energy audit.

A. Introduction

B. I'm Being Audited??!

1. Evaluate
2. Test
3. Measure
4. Determine What Is Practical And Cost Effective
 - a. Appropriate Recommendations
 - b. Projected Savings
5. Note Current Health, Safety And Building Durability Issues
6. Energy Savings And Behavioral Changes
7. Provide A Written Report

C. Audit Levels As Defined By Krigger

1. Level One
2. Level Two
3. Level Three

D. Why Have An Evaluation Performed?

1. Current Homeowner
2. Buying A Home
3. Selling A Home

E. Training And Accreditation

1. State Of Maine Programs And Training
 - a. Maine State Housing Authority
 - b. Maine Home Performance With Energy Star
2. Nationally Recognized Standards
 - a. Building Performance Institute (BPI)
 - b. Residential Energy Services Network (RESNET)

F. Tools Of The Trade

1. Blower Door
2. Infrared Imagery
3. Combustion Safety Test

G. Steps Involved In An Evaluation

1. Client Interview
2. Envelope Inspection
3. Blower Door Test
4. IR Scan
5. Ventilation Inspection
6. Report

H. Further Tasks That May Be Completed

1. Duct Leakage Testing
2. Modeling

I. What Is Included In A Good Report?

1. Observations
2. Calculations
3. Recommendations
4. Pictures

Break

J. I Had An Evaluation. Now What?

1. Do Nothing
2. Perform Some Of The Tasks Yourself
3. Hire A Company To Perform Some Of The Tasks
4. Test Out The Evaluation

K. Incentives

1. Efficiency Upgrade Tax Breaks
2. Renewable Energy Rebates

L. What Is A Rating?

1. Standard Measure Of Efficiency

2. Types
 - a. Projected
 - b. Confirmed

3. HERS Index

M. Why Have A Rating Performed?

1. New Construction
2. Existing Home
3. Buying
4. Selling

N. Rating Vs. Energy Evaluation

1. Rating
2. Energy Evaluation
3. Overlap
4. Both May Be Done Together

O. Building Science

1. As Defined By Krigger And Dorsi
2. Interaction Among Items
3. Occupant Safety First
4. Efficiency And Building Durability Secondary

P. Air Infiltration

1. The Stack Effect
2. Ventilation
3. Build Tight. Ventilate Right
4. Attic
5. Basement And Crawl Spaces
6. Products To Use To Fix Air Infiltration
7. Insulation

Q. Remember ...Safety First

R. Conclusion