

Understanding Green Building for Residential Construction

With energy costs rising, your clients are now seeking energy-efficient designs, materials and methods in the construction of their homes. Mark LaLiberte shares updated techniques for high performance design and residential construction. He will address the issues contractors face when constructing green built, energy efficient homes.

1. Introduction
 - a. General information on the audience & sponsors
 - b. Define the industry
 - i. Complicated business
2. What is a “Better Built, Green Home”?
 - a. A home that’s: Safe, Durable, Healthy, Comfortable, Efficient & Sustainable
 - i. Safe
 - ii. Durable
 - iii. Healthy
 - iv. Comfortable
 - v. Efficient
 - vi. Sustainable
3. Issues affecting change
 - a. Insurance
 - b. Litigation
 - c. Material changes
 - d. Consumer expectations
4. Basic Building Science
 - a. Forces of nature
 - b. Fundamentals of building science
 - c. Heat, Air and Moisture
 - i. Understanding heat flow
 - ii. Airflow effects
 - iii. Moisture flow
 - iv. Thermal enclosure improvements
 - v. Improved mechanical systems

5. The Exterior Wall
 - a. Wall design strategies
 - b. Sheathing type
 - c. Water management
 - d. Windows & doors
 - e. Insulation
6. The Roof
 - a. Roof design strategies
 - i. Moisture Control
 - ii. Air barrier strategies
 - iii. Insulation
7. Mechanical Systems
 - a. General Design Strategies
 - b. Heating Systems
 - c. Cooling Systems
 - d. Ductwork
 - e. Ventilation
8. Advanced framing
 - a. Concepts and opportunities
9. Process changes
 - a. Changing course
 - b. Creating a team
 - c. Testing and verification
10. Developing your communication process
 - a. Taking advantage of high performance
 - b. Teaching an industry
 - c. Listening to market forces
 - d. Building better homes
11. Closing comments
 - a. Questions and review of the day