

Building Science

Building Science is the key to success when upgrading or building energy efficient homes.

This course covers the science behind heat, air and water movement in a home and teaches installers how to avoid future ventilation problems.

In this course, you will learn:

- What's in a building?
The systems approach
- The physical processes
- Interaction of the physical processes and the building sub-systems
- Effects of building materials on heat, air and moisture flow
- Air quality and ventilation



Course Outline

Function A

What's In a Building? The Systems Approach

- explain the meaning of “system” in a building
- identify and explain the three elements of a building

Function B

The Physical Processes

- explain the physical processes of a building
- explain the three ways heat flows
- determine temperature profiles across an envelope assembly
- explain the factors that effect air flow
- explain the ways moisture flows

Function C

Interaction of the Physical Processes and the Building Sub-systems

- explain the interaction of heat flow, air flow, and moisture flow creating the dynamic environment of the building
- explain how physical processes, building subsystems, and external environment interact

Function D

Effects of Building Materials on Heat, Air and Moisture Flow

- explain the effect of materials on heat flow
- explain the effect of materials on air & moisture flow

Function E

Air Quality and Ventilation

- determine the indoor air quality in the building
- identify the moisture sources in the building
- explain the importance of ventilation in the building

Function F

Combustion Back drafting

- explain the interaction between a venting system and the chimney venting system
- explain combustion backdrafting
- identify factors that cause the chimney to spill



For more information about attending or hosting this course, visit our website at www.buildingprofessionalstraining.com or call 1-866-268-6322