

**Training Preview:**  
***'Top 10 Best Practices for Today's Homebuilder'***

**1. Design for Efficiency**

- Code*
- Good:* Continuous thermal boundary
- Better:* Add right sizing design & systems
- Best:* Add optimization with energy modeling

**2. Superior Air Sealing**

- Good:* Air Sealing (basic caulking and foaming)
- Code/Better:* Fully continuous air barrier + blower door test (advanced caulking and foaming)
- Best:* Exterior sheathing sealed (fluid applied, taped or glued sheathing)

**3. High Performance Wall Systems**

- Code*
- Good:* Intermediate or advanced framing with blown-in insulation
- Better:* Single plate with staggered studs + blown ( $\leq$  R-27)
- Better:* 2x6 with exterior continuous insulation
- Best:* R-27 + Insulated sheathing or double stud with blown-in insulation

**4. High R-Value Ceilings**

- Code*
- Good:* Standard truss, R-21 high density batts or rigid insulation + 1" vent channel at eaves
- Better:* Raised heel truss, parallel chord cantilevered truss
- Best:* True vaulted ceiling (I-joist)
- Best:* Insulated roof above attic

**5. Windows**

- Code*
- Good:* Proper U-Value and Solar Heat Gain Coefficient (SHGC) for applications
- Better:* Window design (avoid too much glazing)
- Best:* Daylighting + high performance low U-Value

**6. Ducts and Distribution**

- Good:* Seal ducts with mastic
- Code/Better:* Seal ducts with mastic and test
- Best:* Ducts inside
- Best:* Ductless HVAC system

**7. Fresh Air Ventilation**

- Code/Good:* Exhaust only
- Code/Better:* Supply + exhaust (w/ ECM blower motor)
- Code/Best:* Heat Recovery Ventilator (HRV) or Energy Recovery Ventilator (ERV)

**8. Lighting and Appliances**

- Code*
- Good:* Energy Star appliances
- Better:* Add heat pump dryer
- Best:* Add induction cooktop

**9. Mechanical Systems**

- Code*
- Good:* High-efficiency ducted heat pump
- Good:* Condensing gas furnace
- Better:* Ductless heat pump (DHP)
- Better:* Highest efficiency condensing gas furnace
- Better:* Inverter driven ducted heat pump
- Best:* Add heat pump water heater
- Best:* Condensing tankless gas water heater

**10. Solar Energy**

- None*
- Good:* PV Solar and Electric Vehicle Ready
- Better:* Zero Energy (or ZE Ready)
- Best:* Positive Energy with Electric Vehicle