## Green Home Reference Guide

## **Energy Efficient Features**

## Envelope

- Assembly type- 2X6, SIPs, ICF, alternating studs...
- Air/Shell seal- Attic
- Air/Shell seal- Crawl
- Air/Shell seal- Wall
- Insulation R value- Attic\_\_\_, walls\_\_\_, floors\_\_\_
  - Min 10 inches in attic?
- Insulation QII Quality Installation; no gaps, voids
- Infiltration- Blower Door test results \_\_\_\_\_CFM@50
- Advanced Framing- less wood
- Thermal Bridging- designed to prevent
- Foam wrapped exterior
- Windows- type is EE\_\_\_\_\_. U\_\_\_, SHG\_\_\_
- Windows- positioned for cross breezes & ventilation
- Windows- provide high % natural daylight
- Windows- Shading, eaves, coverings

## **Mechanical Systems**

- Ducts- new
- Ducts- sealed & insulated R8
- Duct leakage tested
- Ductless system
- HVAC- new, sized by design
- HVAC- high EER/SEER
- ERV- Energy Recovery Ventilator
- HRV- Heat Recovery Ventilator

- Ventilation- exhaust
- Ventilation- balanced (supply & exhaust)
- Hot water heater- Energy Star
- Condensing water heater
- Heat pump water heater
- Tankless water heater

#### Base load

(predominantly influenced by occupancy behavior)

- Lighting- high efficacy
- · Lighting- can lights are sealed & insulated
- Permanent appliances- Energy Star
- Energy feedback monitor

## Water Efficiency

#### Interior

- Low flow, high efficacy fixtures
- Insulated hot water pipes
- EE distribution design
- Demand controlled recirculation pump
- Point of entry or use filtration system
- Solar Thermal

#### Exterior

- Auto drip, timed sprinklers
- · Weather controlled sprinkler system
- Pool pump- variable speed, solar
- Water collection or recycling
- Permeable paving

#### Site

- Orientation for solar
- Shading
- Drainage, water management

## Renewable Energy

- Solar photovoltaic
  - Sized for Net Zero
- Solar Thermal

### **NEB Green Features**

### **Indoor Air Quality**

- Ventilation- filtered fresh air
- Bath fan controllers- occupant sensor, timer, humidistat
- Low/no VOC paints & sealants
- No off gassing materials- particleboards, MDF, flooring
- Formaldehyde tested
- Combustion appliances located exterior & tested
- Attached garage has exhaust fan
- H20 heater- sealed combustion
- Fireplace- sealed combustion
- Furnace- sealed combustion

#### Other

- Recycled materials- concrete, wood, tile, \_\_\_\_\_
- Landscaping- drought tolerant
- Landscaping/hardscape- reduce heat island effect
- Location- transportation access, walkscore
- Roof- light colored or "Cool roof"
- Exterior color- lighter
- Sound quality- exterior, interior

## **Energy Rating**

- HERS- 3<sup>rd</sup> party inspection certificate
- HERS- Score
- Designed- minimum 15% above T24
- Other MPG label

# Green Certification (levels?)

- Build It Green
- LEED
- Energy Star
- NAHB

## **Benefits**

- Comfort
- Health
- Lower operating expenses
- Less maintenance
- Durability
- Certainty
- Future proof/rising E costs
- Sustainable for generations

<sup>\*</sup>This guide is intended as a 'quick list' to assist in home inspections. More exhaustive lists can be found in other sources including <a href="http://greenthemls.org">http://greenthemls.org</a>.