



Green Building Principles and Techniques

Lot Design, Preparation and Development

- Stockpile good soil for final site grading to divert surface water from all sides of house
- Properly manage storm water
- Incorporate pre-existing natural vegetation into the landscape
- Utilize permeable materials for parking areas and driveways
- Consider house placement on lot to increase solar gain

Resource Efficiency

- Use efficient floor plan designs
- Use detailed plans and material takeoffs to reduce landfill waste
- Use recycled-content building materials
- Use recycled-content carpet
- Use materials manufactured from renewable resources
- Use locally available, indigenous materials
- Install rain barrel to collect rain water for landscape irrigation

Energy Efficiency

- Construct conditioned crawl space
- Install heating and duct system in conditioned space
- Seal all duct work with mastic
- Install appropriate sized furnace for square footage of home
- Caulk bottom plate of exterior walls
- Create airtight building envelope using Tyvek as thermal barrier
- Build 2x6" exterior walls to allow for extra insulation
- Construct appropriate roof overhangs to regulate solar gain
- Install ENERGY STAR, low-E windows
- Install flashing around all windows and doors
- Seal window flange to sheathing
- Caulk/foam all electrical, plumbing, heating penetrations between floors and to exterior to reduce air transfer
- Install ENERGY STAR appliances and light fixtures

Indoor Air Quality

- Install interior heating equipment and water heating equipment in an isolated area with an outdoor source of combustion and ventilation air
- Install carpet, carpet pad and floor covering adhesives that hold "Green Label" from Carpet and Rug Institute's indoor air quality testing program

- Use low VOC indoor paint
- Use low VOC sealants
- Vent kitchen range exhaust to the outside

Other quality products also used

- 30 year warranty architectural shingles
- Use 5/8" sheathing on roof
- Cut faced block
- T & G Advantech subfloor
- 25 year warranty wood laminate flooring
- Solid wood interior doors and kitchen cabinet doors
- Copper plumbing
- Lifetime warranty faucets

Homeowner Education/Operation and Maintenance

- Provide operation and maintenance instruction for energy efficient features and appliances
- Provide a list of practices to optimize energy and water use
- Provide user-friendly home maintenance checklist
- Provide a list of local service providers

For more information regarding energy-efficient green construction practices, please visit:

- www.energystar.gov
- www.ornl.gov
- www.usgbc.org
- www.nahbgreen.org
- www.southface.org
- www.greenadvantage.org

Allowing Highland Community Builders to use these products will produce a quality-built, energy- efficient, affordable home to meet your needs today and into the future.