



2009 Energy Star "NW Builder Option Package" Envelope Upgrade Path	
INSULATION	
Ceiling Insulation - Flat	R-49
Ceiling Insulation - Rafter Vault	R-30
Ceiling Insulation - Scissor Truss	R-38
Wall Insulation	R-21
Underfloor Insulation	R-38
DOORS & WINDOWS	
Max Glazing Area	21% of home S.F.
Window U-Value	U=.32
Skylights	Code Compliant, max are limited to 5% of heated floor space
Doors	R-5
DUCTS	
Duct Insulation	R-8
Duct Sealing	Mastic Paste Only
Max. Duct Leakage	=<0.06 CFM/ft ² or 75 CFM Total @ 50Pa
Return Air Provisions	may have door undercuts of at 1" as a minimum
VENTILATION & AIR	
Whole House Ventilation	Mechanical Ventilation
Spot Ventilation	Energy Star Qualified or 2 sone or less Bath Fans
Envelope Tightness	7.0 ACH @ 50Pa
HEATING AND COOLING	
Gas Furnace	90 AFUE
Heat Pump	8.5 HSPF/SEER 13
Air Conditioner	SEER 13
Combustion Appliance Zone	CAZ Pressure Test Required
WATER HEATING	
Natural Gas	.62 efficiency
APPLIANCES AND	
Dishwasher	Energy Star Qualified
Lighting	75% of Fixtures fitted with Energy Star Bulbs or Fixtures

EARTH ADVANTAGE SPECIFICATIONS (Specifications may change per home plan)	
1.1.1	Access to Public Transit – 1/2 mile
1.1.3	Develop, Post and Implement Erosion Control Site Plan
1.1.8	Buffer along Natural Features
1.1.9	Protect Non-grading Areas
1.1.10	Pervious Surface: Percentage of hardscape - 25-50% / >51%
2.1.1	Develop and Implement Waste Management Reduction Plan
2.1.2	Recycle 100% of Wood & Cardboard
3.1.2	Weather Barrier: Installed properly
3.1.3	Window/Door Flashing System: Sill pans and/or flexible flashing
3.1.4	Rainscreen Wall System: Airspace under masonry siding
3.1.6	Low-Point Drain: Crawl space or basement
3.3.1	Intermediate Framing Techniques: Insulated corners & Headers
3.4.1	Ceiling Insulation: R49 (R38 in vaults)
3.4.5	Energy or Raised Heel Truss



3.5.1	Floor Insulation: R38
3.5.2	Decking System: T/G Engineered decking
3.5.3	Flooring Support System: I-Joist system used in house
3.7.3	Fiber Cement: 50-yr. warranty (1/50%/51-100%)
3.7.6	Outdoor Patio: Concrete or pavers
3.8.1	Exterior Paint: Low VOC (150/gpl or lower) / Lifetime warranty
3.8.3	Green Seal Certified Paint: Additional points to paint measures
3.9.1	Window Efficiency: U-0.32
3.11.1	Exterior Doors: Steel and/or Fiberglass (R5 min) (28 ft ² exempt)
3.11.3	Blown-in Wall Insulation System: Fiberglass or Cellulose
3.11.5	Concrete with Fly Ash or Slag: (15% - 24% mix / 25% or greater)
4.1.2	Gas Heater for Primary Heat Source: ENERGY STAR reqs.
4.1.4	No Fireplace or Wood Burning Stove Installed in Home
4.2.1	Design Heating/Cooling Loads Using Appropriate Industry Guidelines: Manual J and Manual S or equivalent
4.2.2	Forced Air Gas: Min. 90% AFUE furnace
4.3.1	Design Duct System Using Appropriate Industry Guidelines: Manual D or equivalent
4.3.2	Duct Leakage Test: Max leak <.06 CFM per ft ² of floor OR 75 CFM total @ 50 pa and all ducts sealed with water based mastic
4.3.3	Zonal Pressure Relief
4.4.1	Protect Duct Vents: Cover supply/return vents during construction and install temporary filter on cold return vent
4.4.2	House Dry-out: No central heating system or propane used
5.1.1	House Tightening Measures: Blower Door Test
5.1.2	Thermal Bypass Checklist: ENERGY STAR National Checklist
5.2.3	Balanced System: Exhaust and supply balanced
6.1.1	ENERGY STAR Lighting Package: 75%+ of fixtures are fitted with ENERGY STAR products
6.2.1	Dishwasher: ENERGY STAR spec
7.1.1	Combustion Air Zone Safety: Test req. or combustion within shell
7.1.2	Third-Party Framing Lumber Moisture Test: 19% or lower
7.1.3	Air Filter: MERV 8 - 12 / 13 or higher
7.1.5	Bath Fans: Fans in full baths meet ENERGY STAR requirements
7.1.6	Bath Fan Controls: All Controls - Occupancy/Timer/Humidistat
7.1.10	Humidity Control System: Permanently installed
7.2.1	Wall & Ceiling Latex Paint: Low VOC (150 – 50/<50 grams per liter)
7.2.2	Green Seal Certified Paint: Additional point to 7.2.1 measure
8.1.1	Local Materials: Within 500 miles - 1 point each - up to 4 items
8.2.5	Built-in Recycling Center: Minimum 2 major receptacles
8.3.2	Engineered Wood: MDF or finger-jointed
8.4.2	Hard Surface: Finished floor (25-50% / 51-75% / 76-100%)
8.4.5	Carpet: Post-consumer recycled content (20-50% / 51%-100%)
8.4.8	Urea Formaldehyde-free Underlayment OSB, MDF Exterior grade plywood
9.1.1	Whole-House Pressure Regulating Valve
9.1.2	Efficient Showerhead: <=2 gpm or Water Sense label – one showerhead per stall
9.1.3	Efficient Lavatory Faucet: 1.5/0.5 gpm or less or Water Sense label
9.1.4	Efficient Kitchen Faucet: 1.5 gpm or less
9.2.2	Low-Volume Irrigation System
9.2.3	Hydro Zoning: Grouping of plants and lawn for watering
9.2.4	Irrigation Controller: Water saving features



11.1.1	Energy Modeling: Use of HERS energy scoring system
11.1.3	Green Team Meeting / Includes EA STAR Realtor
11.1.4	Certified Master Home Builder: Builder certified
11.1.5	Homeowner Manual: Earth Advantage information included

Note: Blown In Blanket Insulation and Energy Heel Trusses/Enclosed Soffits are NOT required by Energy Star or Earth Advantage but they are Best Practices and included in CDC's ES/EA package.

