

EarthCraft Multi Family Points 2011 LIHTC



Developers participating in VHDA's 2011 LIHTC Program will have the opportunity to achieve greater gains in energy efficiency, resident comfort, and earn higher points in the competitive scoring process under the QAP. EarthCraft Virginia will utilize Residential Energy Services Network approved REM/Rate Energy Modeling software will be utilized to help guide project teams' decisions in regard to what level of efficiency they plan to achieve with their proposed development. The following points are available based on proposed improvements:

- **New Construction** – based on the 2004 International Energy Conservation Code (IECC)
 - 15% improvement over IECC 2004 = 15 QAP points
 - 20% improvement over IECC 2004 = 30 QAP points
 - 25% improvement over IECC 2004 = 45 QAP points
- **Renovation** – based on the improvement over the existing conditions of the property
 - 30% improvement over baseline = 15 QAP points
 - 40% improvement over baseline = 30 QAP points
 - 50% improvement over baseline = 45 QAP points

Scheduling a review:

Project teams are encouraged to contact the EarthCraft Virginia office as soon as possible to allow for proper review of architectural drawings and project specifications **BEFORE** the March 11 Reservation Application deadline. Allow 3-4 weeks for plan review, energy modeling, and project summary. If you have any questions on this process, please contact Philip Agee at the EarthCraft Virginia office – 804.225.9843 x1141 or Philip.Agee@earthcraftvirginia.org.

Example of how to potentially earn maximum points on a **new construction** development (this example may not work for all developments, depending on project specifics):

- Code built apartment – R13 fiberglass batt insulation, 2x4 16” on center wall framing, builder grade windows, 13 SEER 7.7 HSPF HVAC equipment, 40 gallon 0.90 EF water heater, standard lights and appliances. **0% better than IECC 2004**
- 15 SEER 8.5 HSPF HVAC equipment, Energy Star rated windows, programmable thermostat, minimum EarthCraft envelope tightness (0.35 ACH/n) and duct leakage (5% leakage to the outside) **15% better than IECC 2004, 15 QAP points**
- Energy Star refrigerator and dishwasher, 50% of the lights in the apartment are Energy Star pin based lights, 15 SEER 8.5 HSPF HVAC equipment, Energy Star rated windows, programmable thermostat, minimum EarthCraft envelope tightness (0.35 ACH/n) and duct leakage (5% leakage to the outside) **20% better than IECC 2004, 30 QAP points**
- 2x6 24” on center framing with blown insulation in the cavity, R3 continuous exterior insulation, Energy Star refrigerator and dishwasher, 50% of the lights in the apartment are Energy Star pin based lights, 15 SEER 8.5 HSPF HVAC equipment, Energy Star rated windows, programmable



thermostat, minimum EarthCraft envelope tightness (0.35 ACH/n) and duct leakage (5% leakage to the outside) **25% better than IECC 2004, 45 QAP points**

Example of how to potentially earn maximum points on a **renovation** development (this example may not work for all developments, depending on project specifics):

- **Existing condition** – garden-style apartments constructed in 1980 – uninsulated walls, slab and band joist, R19 attic insulation, single-pane metal frame windows, 7.5 SEER 5.5 HSPF HVAC equipment, 40 gallon .81 EF water heater, 25% duct leakage to the outside, leaky thermal envelope (1.5 ACH/n)
- R38 blown attic insulation, 15 SEER 8.5 HSPF HVAC equipment, Energy Star rated windows, 0.92 EF water heater, Energy Star refrigerator and dishwasher, minimum EarthCraft envelope tightness (0.60 ACH/n) and duct leakage (10% leakage to the outside) **30% better than existing conditions, 15 QAP points**
- R13 walls and band joist, R38 blown attic insulation, 15 SEER8.5 HSPF HVAC equipment, Energy Star rated windows, 0.92 EF water heater, Energy Star refrigerator and dishwasher, minimum EarthCraft envelope tightness (0.60 ACH/n) and duct leakage (10% leakage to the outside) **40% better than existing conditions, 30 QAP points**
- R13 walls and band joist, R38 blown attic insulation, 15 SEER 8.5 HSPF HVAC equipment, programmable thermostat, Energy Star rated windows, Energy Star water heater, Energy Star refrigerator and dishwasher, 100% Energy Star pin-based lights, minimum EarthCraft envelope tightness (0.60 ACH/n) and duct leakage (10% leakage to the outside) **50% better than existing conditions, 45 QAP points**