# Alternative Fuels Off-the-Grid Rubric

Criteria	Novice (1)	Apprentice (2)	Practitioner (3)	Expert (4)
FLOOR PLAN/ BLUEPRINTS	Scale is clear & accurate  One or two of the following drawings are complete and accurate:  Framing  Wall dimensions  Square footage  Learning  Learning  Utility room  Laundry Room  Window/Door placement  Top, Front, Side view  HVAC  Red for hot  Electrical  White for neutral  Room  Water/Sewage:  Blue for cold  Red for hot  Blue for cold	Three of the following drawings are complete and accurate:  Framing  Wall dimensions  Square footage  Carry Bodrooms  Laundry Room  Laundry Room  Window/Door placement  Top, Front, Side view  HVAC  Blue for cold  Red for hot  Electrical  White for neutral  Black for hot  Water/Sewage:  Blue for cold  Red for hot  Water/Sewage:  Blue for cold  Black for sewage	Scale is clear & accurate  All of the following drawings are complete and accurate:  Framing  Wall dimensions  Square footage  Complete and accurate:  Framing  Utility room  Laundry Room  Window/Door placement  Top, Front, Side view  HVAC  Blue for cold  Red for hot  Electrical  White for neutral  Black for hot  Water/Sewage:  Blue for cold  Red for hot  Black for sewage	All of the Practitioner plus either one of the following:  • drawn using CAD program  or  • color coded and drawn on architect drawing paper  or  • plan submit and "approved" by Town Inspectors and/or Local Contractor

The *Design Process* has been followed and shows evidence of:

#### **FRAMING**

Consideration of only <u>one</u> of the following:

- 1. Two to three framing style
- 2. The type of wood
- 3. The dimensions of the footprint, bathrooms, kitchen, bedrooms

# **HVAC**

Consideration of and capacity calculations for only <u>one</u> type of HVAC system, including the furnace system

Critiquing & Brainstorming, Revisions

### **ELECTRICAL**

<u>No</u> consideration is given to the type of circuit boards nor the comparison of storage versus being on the grid

# **WATER & SEWAGE**

<u>No</u> consideration is given for the comparison of well water versus town water supply nor the types of piping The *Design Process* has been followed and shows evidence of:

# **FRAMING**

Consideration of <u>two</u> of the following:

- 1. Two to three framing styles
- 2. The type of wood
- 3. The dimensions of the footprint, bathrooms, kitchen, bedrooms

# **HVAC**

Consideration of and capacity calculations for <u>two</u> types of HVAC systems, including furnace systems

## **ELECTRICAL**

Consideration of only <u>one</u> of the following:

- 1. Two to three types of circuit boards
- 2. Comparison of storage versus being on the grid, with a minimum of four aspects

#### WATER & SEWAGE

Consideration of only <u>one</u> of the following:

- 1. Comparison of well water versus town water supply
- 2. Two to three types of piping

The *Design Process* has been followed and shows evidence of:

#### FRAMING

Consideration of <u>all</u> of the following:

- 1. Two to three framing styles
- 2. The type of wood
- 3. The dimensions of the footprint, bathrooms, kitchen, bedrooms

# HVAC

Consideration of and capacity calculations for <u>three</u> types of HVAC systems, including furnace systems

# **ELECTRICAL**

Consideration of <u>all</u> of the following:

- 1. Two to three types of circuit boards
- 2. Comparison of storage versus being on the grid, with a minimum of four aspects

## WATER & SEWAGE

Consideration of <u>all</u> of the following:

- 1. Comparison of well water versus town water supply
- 2. Two to three types of piping

All of the Practitioner plus:

Written correspondence to various suppliers/ manufacturers

Obtained samples of products

Scale Model	Incomplete or improperly scaled prototype is constructed	Complete scaled prototype constructed	Complete scaled prototype constructed with removable roof	All of the Practitioner plus: scaled furniture and landscaping
COST ESTIMATE	Includes costs for two to three of the following:  1. Foundation 2. Framing 3. Insulation 4. Drywall 5. Finish carpentry 6. Paint 7. Roof shingles  Final cost for dwelling is missing or improperly calculated	Includes costs for <i>four to five</i> of the following:  1. Foundation 2. Framing 3. Insulation 4. Drywall 5. Finish carpentry 6. Paint 7. Roof shingles  Final cost for dwelling is accurately calculated based on the elements selected	Includes costs for <i>all</i> of the following:  1. Foundation 2. Framing 3. Insulation 4. Drywall 5. Finish carpentry 6. Paint 7. Roof shingles  Final cost for dwelling is accurately calculated	All of the Practitioner plus:  Cost analysis provided for more than one type of:  wood  HVAC systems  Electrical systems  Water & Sewage systems