**All of the measures below are to be installed in accordance with the Weatherization Field Manual. The measures should be installed in the sequence listed, unless otherwise approved by NHD and documented in the file.**

1. **Health and Safety Activities:** 
   * 1. Diagnostic Testing
     2. Primary Heating System –Repair or Replace with a 90% AFUE under the following conditions:
        + Unit is inoperable or unsafe based on HVAC evaluation.
        + Furnace (15 years or older) excluding electric heat. (charge to program operations)
     3. Repair/Replace Gas Water Heater for CAS Failure only.
     4. Repair/Replace Gas Cooking Appliances for CAS Failure only.
     5. Replace damper and/or exhaust fan when inoperable (Mobile

Homes with gas appliances only)

* + 1. CO Alarms (Maximum 2 per dwelling)

1. Catastrophic Shell Sealing only (12 sq. in. or more), photo documentation required.
2. Duct Sealing

**In addition to the above, install the following measures based on housing type:**

**Single Family:**

1. Floor Insulation (where none exists)
2. ESP Shell Sealing
3. Duct Insulation (where none exists)
4. Attic Insulation (supersedes floor insulation if none existing) Bring attic up to R-38 if existing is R-19 or less, must include attic hatch insulation. If existing is above R-19 but hatch is not insulated, insulate hatch only with R-19.
5. LED if < $15 or CFL light bulbs (5 maximum and only for incandesant replacement)
6. Low flow showerhead
7. Water Heater Blanket (unconditioned space)
8. Water Heater Pipe Wrap (unconditioned space)
9. Refrigerator Replacement (Use WAPTAC website or default chart attached if not listed or unable to find data)
10. Interior Storm Windows (if the primary windows are single pane, close, and latch.)

1. Dual Pane Low E Windows (only in place of jalousie or inoperative single pane; operable single pane windows with storms do not qualify. Photo required), pre 1978 - all lead safe work practices apply or installation of measure is non-feasible)

**Mobile Home:**

1. ESP Shell Sealing
2. Floor Insulation (where none exists)
3. LED if < $15 or CFL light bulbs (5 maximum and only for incandesant replacement)
4. Low flow showerhead
5. Water Heater Blanket (unconditioned space)
6. Water Heater Pipe Wrap (unconditioned space)
7. Refrigerator Replacement (Use WAPTAC website or default chart attached if not listed or unable

to find data)

1. Interior Storm Windows (if the primary windows are single pane, close, and latch.)
2. Dual Pane Low E Windows (only in place of jalousie or inoperative single pane; operable single pane windows with storms do not qualify. Photo required) Windows must be at least.30 U-factor and .30 SHGC

**Multi- Family:**

The only allowable measures for Multi-family Dwellings (1-4 units located in multi-building complex under single ownership and 5+ unit buildings under single ownership) are as follows:

* Carbon Monoxide Alarm (2 per unit, max)
* Water heater blanket (unconditioned space)
* Water heater pipe wrap (unconditioned space)
* Low flow showerhead, LED if < $15 or CFL light bulbs (5 maximum and only for incandesant replacement))

**The following are considered capital improvements may be considered on a case by case basis. A 50% owner contribution on all capital improvements is required.**

* Duct Insulation – R-8 or higher (where none exists)
* Floor Insulation (where none exists)
* Refrigerator replacement.
* Ceiling Insulation – Bring attic up to R-38 if existing is R-19 or less, must include attic hatch insulation. If existing is above R-19 but hatch is not insulated, insulate hatch only with R-19.
* HVAC replacement - All air handler replacement will require duct leakage testing and sealing if necessary (REM Design required on all HVAC replacements to meet SIR requirements).

**Refrigerator Replacement Default Chart:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Annual kWh/yr**  **Existing Unit** | **Max. Replacement Cost by**  **Annual kWh/yr of New**  **Refrigerator** | | |
| **400 kWh/yr** | **500 kWh/yr** | **600 kWh/yr** |
| **800** | $750 | $600 | $450 |
| **900** | $900 | $750 | $600 |
| **1000** | $1,050 | $900 | $750 |
| **1100** | $1,200 | $1,050 | $900 |
| **1200** | $1,350 | $1,200 | $1,050 |
| **1300** | $1,500 | $1,350 | $1,200 |
| **1400+** | $1,660 | $1,500 | $1,350 |

Rental Units: All rental units; Single family, 2-4 units, mobile homes and

5+ require a 50% owner contribution for all capital improvements. (See

Grant Award Financial Assurance, Item 17.)