# RESIDENTIAL ENERGY ADDITIONAL MEASURE SELECTION 

## 2023 Oregon Residential Specialty Code Compliance

CITY OF HERMISTON- BUILDING DEPARTMENT
180 NE $2^{\text {nd }}$ St., Hermiston, OR 97838
541.667.5025 ext 2.

| RESIDENTIAL INFORMATION |  |
| :--- | :--- |
| Date: | Owner/Contractor Name: |
| Site Address: | Hermiston |
| INSTRUCTIONS |  |
| Please select type of construction below. If the project is an addition, select the applicable addition type and enter the <br> selected measures; accordingly, print \& sign your name. Submit this form with your permit application or your project <br> may be placed on hold until the required information is provided. |  |

$\square$ New Construction:
New Construction- Residential: All conditioned spaces within a residential building must comply with Table N1101.1(1) and one additional measure from Table N1101.1(2). Please circle selection on next page.

Note: If using Exception 3 of Section N1105.3 for the installation of ducts and air handling equipment, two additional measures shall be selected for compliance from Table V1101.1(2)
ADDITIONS: Additions to existing buildings or structures may be made without making the entire building or structure comply if the new additions comply with the requirements of the chapter. \{See ORSC Section N1101.3\}
$\square$ Large Additions: Additions that are equal to or more than 600 square feet in area are required to select one measure from Table N1101.1(2) on next page.

Enter selected item from Table N1101.1(2) additional measure $\qquad$
$\square$ Small Additions: Additions that are less than 600 square feet in area are required to select one measure from Table N1101.1(2) or select one measure from Table N1101.3

Selected Table N1101.1(2) additional measure
OR
Selected Table N1101.3 additional measure $\qquad$
$\square$ Exceptions: Additions that are less than 225 sq ft in area, shall not be required to comply with Table N1101.1(2) or Table N1101.3

For Reference Tables N1101.1(2) and N1101.3 are included on this form.
Note: Depending on which Additional Measures you have selected, there may be sub-options that you will have to specify. Check the appropriate box if provided.
Applicant Signature:
Print Name:
TABLE N1101.3- SMALL ADDITION ADDITIONAL MEASURES

| 1 | Increase the ceiling insulation of the existing portion of the home as specified in Table N1101.2 |
| :---: | :--- |
| 2 | Replace all existing single-pane wood or aluminum windows to be U-value as specified in Table N1101.2 |
| 3 | Insulate the existing floor, crawlspace or basement wall systems as specified in Table N1101.2 and install 100 percent of permanently <br> installed lighting fixtures as CFL, LED, or linear fluorescent or min. efficacy of 40 lumens per watt as specified in Section N1107.2 |
| 4 | Test the entire dwelling with a blower door and exhibit no more than 4.5 air changes per hour @ 50 Pascals. |
| 5 | Seal and performance test the duct system |
| 6 | Replace existing 80\% AFUE or less gas furnace with a 94\% AFUE or greater system |
| 7 | Replace existing electric radiant space heaters with a ductless mini-split system with a minimum HSPF of 10.0 or HSPF2 of 9.0. |
| 8 | Replace existing electric forced air furnace with an air source heat pump with a minimum HSPF of 9.5 or HSPF2 or 8.1. |
| 9 | Replace existing water heater with one of the following: <br> a. Natural gas/propane water heater with minimum UEF 0.90, or <br> b. Electric heat pump water heater with minimum 3.45 UEF.. |

## TABLE N1101.1(2) ADDITIONAL MEASURES

| $1 \square$ | HIGH EFFICIENCY HVAC SYSTEM ${ }^{\text {a }}$ |
| :---: | :---: |
|  | a. Gas-fired furnace or boiler AFUE 94 percent, or <br> b. Air source heat pump HSPF 10.0/16.0 SEER cooling, or 8.5 HSPF2/15.0 SEER2, or <br> c. Ground source heat pump COP 3.5 or Energy Star rated |
| $2 \square$ | HIGH EFFICIENCY WATER HEATING SYSTEM |
|  | a. Natural gas/propane water heater with minimum 9.0 UEF, or <br> b. Electric heat pump water heater with minimum 3.45 UEF, or <br> c. Natural gas/propane tankless/instantaneous heater with minimum 0.80 UEF and Drain Water Heat Recovery Unit installed on minimum of one shower/tub-shower |
| $3 \square$ | WALL INSULATION UPGRADE |
|  | Exterior walls- U-0.045/R-21 conventional framing with R-5.0 continuous insulation |
| $4 \square$ | ADVANCED ENVELOPE |
|  | Windows-U-0.21 (Area weighted average), and <br> Flat ceiling ${ }^{\text {b }}$ U-0.017/R-60, and <br> Framed floors-U-0.026/R-38 or slab edge insulation to F-0.048 or less (R-10 for 48"; R-15 for 36" or R-5 fully insulated slab) |
| $5 \square$ | DUCTLESS HEAT PUMP |
|  | a. Provide ductless heat pump of minimum HSPF 10 or HSPF2 9.0 in primary zone replaces zonal electric hear sources, and <br> b. Provide programmable thermostat for all heaters in bedrooms. |
| 6 $\square$ | HIGH EFFICIENCY THERMAL ENVELOPE UA ${ }^{\text {c }}$ |
|  | Proposed UA is 8\% lower than the code UA |
|  | 2.75 ACH AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION |
| $7 \square$ | Achieve a maximum of 2.75 ACH50 whole-house air leakage when third-party tested and provide a whole-house ventilation system including heat recovery with a minimum sensible heat recovery efficiency of not less than 66 percent and total fan efficacy of 1.6 CFM/Watt(combined input for supply and exhaust) |

For SI: 1 square foot $=0.093 \mathrm{~m}^{2}, 1$ watt per square foot $=10.8 \mathrm{~W} / \mathrm{m}^{2}$.
a) Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors.
b) The maximum vaulted ceiling surface area shall not be than 50 percent of the total heated space floor area unless vaulted area has a Ufactor no greater than U-0.026.
c) In accordance with Table N1104.1(1), the Proposed UA total of the proposed Alternative Design shall be a minimum of 8 percent less than the Code UA total of the Standard Base Case.

