**Energy Plan Review and Inspection Form**

Building ID: Date: Name of Plans Examiner:

Building Contact: Name: Phone: Email:

Building Name & Address:

Subdivision: Lot #:

State: County: Jurisdiction:

**Choose a compliance path (all paths are based on 2009 editions):**

* IECC/IRC Ch. 11 Prescriptive
* IECC – UA Alternative (e.g. RES*check*)[[1]](#endnote-1)
* IECC – Simulated Performance Alt. (e.g. REM/Rate)[[2]](#endnote-2)
* Pennsylvania Alternative (PA-Alt)

Yes | No Will the basement be conditioned?[[3]](#endnote-3)

|  |
| --- |
| **Building Thermal Envelope Compliance** |
| Component | **Builder or designer:** Proposed R-value[[4]](#endnote-4) | **Reviewer:** R-value shown on plans and complies?[[5]](#endnote-5) | **Inspector**: Value observed in field complies? |
| **Ceilings** |
| Ceiling with attic space (flat ceiling) |  | Y N NA | Y N NA |
| Ceiling w/o attic space (e.g. vaulted) |  | Y N NA | Y N NA |
| **Above grade framed walls** |
| Typical above grade walls |  | Y N NA | Y N NA |
| Attic knee walls |  | Y N NA | Y N NA |
| Rim/band joists |  | Y N NA | Y N NA |
| Walkout portion of basement |  | Y N NA | Y N NA |
| **Mass walls (>50% above grade)** |
| 1st through 3rd floors |  | Y N NA | Y N NA |
| Enclosing a conditioned basement |  | Y N NA | Y N NA |
| **Floors** |
| Over outside air (e.g. cantilever) |  | Y N NA | Y N NA |
| Over vented crawl space |  | Y N NA | Y N NA |
| Over unconditioned basement[[6]](#endnote-6) |  | Y N NA | Y N NA |
| **Foundation** |
| Basement walls |  | Y N NA | Y N NA |
| Unvented crawl space walls |  | Y N NA | Y N NA |
| Slabs on grade[[7]](#endnote-7) |  | Y N NA | Y N NA |

* The highest window U-factor listed on the plans is less than or equal to 0.35. 15 ft2 of windows are exempt, otherwise a tradeoff or performance approach must be used.

**Choose and air sealing verification option (choose 1):**

* Visual inspection (see attached checklist)[[8]](#endnote-8)
* Blower door test **If chosen:** Proposed ACH50 (perf. path only) \_\_\_ Field verified ACH50 \_\_\_ (7 ACH50 max)

**Ducts:**

Yes |No Is the air handler or any portion of the duct system located outside of conditioned space? If yes, complete the rest of this section:

* *Supply ducts in ventilated attics* have an R-value of at least **R-8,** as indicated on the plans
* Ducts outside of conditioned space have an R-value of at least **R-6**, as indicated on the plans

|  |  |
| --- | --- |
|  | **Duct leakage rate in cfm per 100 ft2 conditioned floor area** |
| **Choose the proposed type of duct leakage test:** | **Required Rate***(Prescriptive)* | **Proposed Rate***(Performance path only)* | **Field verified Rate** *(from report provided by permit holder)* |
| □ Rough-in test with air handler  | 6 cfm/100 ft2  |  |  |
| □ Rough-in test **without** air handler  | 4 cfm/100 ft2  |  |  |
| □ Post-construction test – leakage to outdoors | 8 cfm/100 ft2  |  |  |
| □ Post-construction test – total leakage  | 12 cfm/100 ft2  |  |  |

**Equipment sizing:**

* Manual J heating and cooling load calculation report is attached
* Manual S equipment sizing report is attached
* Cooling capacity per Manual S \_\_\_\_ Proposed cooling capacity \_\_\_\_\_
* Proposed cooling capacity is less than or equal to 1.15 times[[9]](#endnote-9) the size specified by Manual S report, or next nominal size

**Lighting:**

* Building plans indicate that at least 50 percent of the bulbs in permanently installed fixtures will be high-efficacy

**Details and notes:**

* Required details or notes, when applicable (attached are examples of details that may be used)
	+ Slab on grade with insulation extending downward from the top of the slab
	+ Insulated corners: Framing allows space for insulation
	+ Insulated headers: Insulation installed in headers as space allows
	+ Fireplaces on exterior walls: Air barrier between insulation and fireplace insert
	+ Dropped ceiling/soffit: Air barrier aligned with insulation
	+ Porch roofs: Exterior wall sheathing extends behind intersection with porch roof
	+ Skylight shafts: Shaft walls are insulated and include attic-side air barriers
	+ Showers/tubs on exterior walls: Air barrier located between wall insulation and the shower/tub
	+ Knee walls: Air barrier on attic side of knee wall, top plate installed, blocking between floor joists under knee wall
	+ Cantilevered floors: Insulated with solid air barriers underneath insulation and blocking between joists
	+ Attic access hatches: Weatherstripped and insulated to the same R-value as the surrounding surface
1. Applicant must provide the compliance certificate and inspection checklist generated by RES*check* (or other approved UA calculation tool) [↑](#endnote-ref-1)
2. Applicant must provide compliance certificate and inspection checklist, including proposed infiltration and duct leakage rates. To receive a certificate of occupancy, blower door and duct leakage test results must be provided to verify that the leakage rates are not exceeded. [↑](#endnote-ref-2)
3. If the basement will be conditioned, a basement wall R-value must be listed [↑](#endnote-ref-3)
4. Mark as NA where not applicable [↑](#endnote-ref-4)
5. For homes under the UA or Performance approach, R-values must also match RES*check*, REM/Rate, or other documentation. [↑](#endnote-ref-5)
6. A minimum of R-19 may be installed when using the Pennsylvania Alternative [↑](#endnote-ref-6)
7. Slab insulation is required anywhere the space above the slab is conditioned and the floor is location 12” or less below grade. This may include portions of walkout basements. A half-inch thermal break instead of a full R-10 is allowed under the Pennsylvania Alternative [↑](#endnote-ref-7)
8. The code official may require an approved party independent from the installer of the insulation to inspect the air barrier and insulation. A list of HERS Raters participating in the Penn Energy Codes Program can be found at pennenergycodes.com. [↑](#endnote-ref-8)
9. The cooling capacity of a heat pump may be 1.25 times the size specified by Manual S report [↑](#endnote-ref-9)