Plan Review and Inspection Form – Climate Zone 5

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*)[i]
- □ IECC – Simulated Performance Alt. (e.g. REM/Rate)[ii]
- □ Pennsylvania Alternative (PA-Alt)

Yes | No Will the basement be conditioned?[iii]

Building Thermal Envelope Compliance				
Component	Required R-value[iv]	R-value on plans[v]	Reviewer verification: Complies?	Inspector verification: Complies?
Ceilings				
Ceiling with attic space (flat ceiling)	R-38		Y N NA	Y N NA
Ceiling without attic space (rafters)	R-30		Y N NA	Y N NA
Above grade framed walls				
Typical above grade walls	R-20 or 13+5		Y N NA	Y N NA
Attic knee walls	R-20 or 13+5		Y N NA	Y N NA
Rim/band joists	R-20 or 13+5		Y N NA	Y N NA
Walkout portion of basement	R-20 or 13+5		Y N NA	Y N NA
Mass walls (>50% above grade)				
1st through 3rd floors	13/17		Y N NA	Y N NA
Enclosing a conditioned basement	13/17		Y N NA	Y N NA
Floors				
Over outside air (e.g. cantilever)	R-30		Y N NA	Y N NA
Over vented crawl space	R-30		Y N NA	Y N NA
Over unconditioned basement[vi]	R-30		Y N NA	Y N NA
Foundation				
Basement walls	R-10/13		Y N NA	Y N NA
Unvented crawl space walls	R-10/13		Y N NA	Y N NA
Slabs on grade[vii]	R-10, 2 ft.		Y N NA	Y N NA

□ The highest window U-factor listed on the plans is less than or equal to 0.35. 15 ft^2 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)[viii]
- □ 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 ft^2 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 ft^2		
□ Rough-in test **without** air handler	4 cfm/100 ft^2		
□ Post-construction test – leakage to outdoors	8 cfm/100 ft^2		
□ Post-construction test – total leakage	12 cfm/100 ft^2		

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[ix] 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

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[i] Applicant must provide the compliance certificate and inspection checklist generated by RES*check* (or other approved UA calculation tool)

[ii] 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.

[iii] If the basement will be conditioned, a basement wall R-value must be listed

[iv] Required R-values may vary when using the UA Alternative or Simulated Performance Alternative. The applicant must attach a separate compliance certificate and inspection checklist

[v] May be marked NA for Not Applicable

[vi] A minimum of R-19 may be installed when using the Pennsylvania Alternative

[vii] 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

[viii] 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.

[ix] The cooling capacity of a heat pump may be 1.25 times the size specified by Manual S report