COMPLIANCE WORKSHEET

2025 PENNSYLVANIA ALTERNATIVE RESIDENTIAL ENERGY PROVISIONS (PA-ALT)

PROJECT

ADDRESS OF JOB _____

PERMIT APPLICANT _____

PERMIT # *(to be filled out by code office)* _____

DATE _____ DATE ON PLANS _____

CLIMATE ZONE _____ PHONE # _____

About the 2025 PA-Alt:

Per the Pennsylvania Department of Labor & Industry at *https://www.pa.gov/agencies/dli/programs-services/labor-management-relations/bureau-of-occupational-and-industrial-safety/uniform-construction-code-home.html:*

The UCC regulations [34 Pa. Code Chapter 403.21 (d)(1)] provide for the use of an alternative to Chapter 11 of the International Residential Code (or Chapter 4 (RE) of the International Energy Conservation Code), to demonstrate compliance with the energy conservation requirements of the UCC. This alternative compliance path, which can be obtained by clicking on the link below, was developed by the Pennsylvania Housing Research Center at Penn State and is entitled "Pennsylvania Alternative Residential Energy Provisions." **Access the 2025 PA-Alt at** *https://bit.ly/2025PA-Alt.*

How to use the 2025 PA-Alt:

- This worksheet is only intended to aid in permit application submission. The entirety of the 2025 PA Alternative Residential Energy Provisions must be followed, including all mandatory provisions.
- **Entrance requirements:** To utilize the PA-Alt, the building owner or agent must choose at least one of the energy enhancement options in Table PA104.

  Entrance option selected:
- **Insulation and fenestration criteria.** The building thermal envelope shall meet the requirements of Table PA301 based on the climate zone specified in PA201.

Climate Zone	Fenestration[b] U-factor	Skylights[b] U-factor	Glazed Fenestration SHGC[b,e]	Ceiling R-value	Wood Frame Wall R-value	Mass Wall R-value[f]	Floor R-value	Basement[c] Wall R-value	Slab[d] R-value and depth	Crawlspace[c] Wall R-value
Proposed										

PA201.1 Climate Zones:

4: Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Delaware, Franklin, Lancaster, Lebanon, Montgomery, Perry, Philadelphia, York

5: All other counties

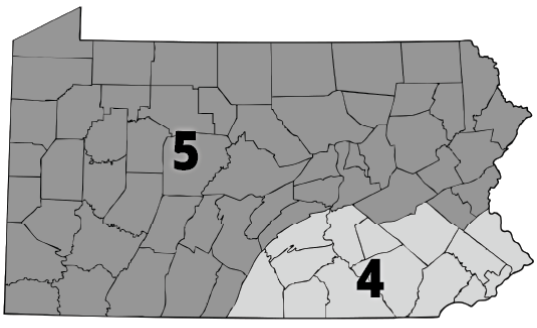

Table PA104

Energy Enhancement Options

Option	Description		Minimum efficiency by climate zone	
			4	5
1	Ductless heat pumps[a]		8.6 HSPF2 and 18 SEER2	8.6 HSPF2 and 18 SEER2
2	All air ducts located inside the thermal envelope		Compliant	Compliant
3	Geothermal or water source heat pump installed[a]		Compliant (COP 3.6)	Compliant (COP 3.6)
4	Improved efficiency air source heat pump installed[a]		7.7 HSPF2 and 16.2 SEER2	8.4 HSPF2 and 18.1 SEER2
5	Improved efficiency condensing furnace installed[a]		92.5 AFUE	92.5 AFUE
6	Exterior continuous insulation		R20+10	R20+15
7	Improved efficiency windows		U-factor = 0.21	U-factor = 0.19
8	Package: Improved efficiency windows and higher attic R-value with raised heel truss[b]	Windows	U-factor = 0.25	U-factor = 0.21
		Attic	R-value = 60	R-value = 60
9	Package: Improved efficiency windows and heat pump water heater	Windows	U-factor = 0.25	U-factor = 0.21
		Heat Pump Water Heater	UEF = 3.5	UEF = 3.5

Notes:

a. For multiple cooling systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the cooling design load. For multiple heating systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the heating design load.

b. Full height of uncompressed insulation shall extend over the top plate at the eaves.

Table PA301

Insulation and Fenestration Requirements by Component[a]

Climate Zone	Fenestration[b] U-factor	Skylights[b] U-factor	Glazed Fenestration SHGC[b,e]	Ceiling R-value	Wood Frame Wall R-value	Mass Wall R-value[f]	Floor R-value	Basement[c] Wall R-value	Slab[d] R-value and depth	Crawlspace[c] Wall R-value
4	0.32	0.55	0.4	49	20[g] or 13+5[e]	8/13	19	10/13	10, 2 ft	10/13
5	0.30	0.55	NR	49	23[h], 20+3.8[e], or 13+7.5[e]	13/17	30	10/13	10, 4 ft or 15, 3 ft	10/13

Notes:

a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

c. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation on the interior of the basement wall.

d. For heated slabs, refer to requirements in 2021 IRC Table N1102.1.3 (R402.1.3) as modified and 2021 IRC Section N1102.2.9 (R402.2.9).

e. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "13+5" means R-13 cavity insulation plus R-5 continuous insulation.

f. Mass walls shall be in accordance with 2021 IRC Section N1102.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

g. R-18 insulation shall be permitted in place of R-20 requirement provided the construction of the wall is of the advanced framing type, has a framing factor of 19% and insulation is installed per ANSI/RESNET/ICC 301-2022 Section 4.2.2.1 and Table 4.2.2(6).

h. R-20 insulation shall be permitted in place of R-23 requirement provided the construction of the wall is of the advanced framing type, has a framing factor of 19% and insulation is installed per ANSI/RESNET/ICC 301-2022 Section 4.2.2.1 and Table 4.2.2(6).