

**TOWNSHIP OF PINE**  
230 PEARCE MILL ROAD  
WEXFORD, PA 15090  
(724) 625-1591

**PA State Uniform Construction Code**  
**Residential Building Permit Submission Requirements**

**NOTE: EFFECTIVE DECEMBER 31, 2009, THE 2009 INTERNATIONAL RESIDENTIAL CODE IS APPLICABLE.**

**Submission Requirements:**

The following residential projects are required to obtain Township of Pine Building and/or Zoning Permits prior to the start of construction:

- New home construction
- Home additions and decks
- Structural alterations
- Finished basements
- Accessory structures (sheds, garages, pools, and fences over 6 foot)
- Any non-ordinary repair to any mechanical, fuel gas, energy, electrical, plumbing or building system
- **Grading Permit** is required for any retaining wall exceeding 4 foot in height

The following items must be submitted with the completed Building Permit Application:

- Two sets of drawings of the proposed construction. One copy of the drawings must have the original seal and signature of a registered design professional, engineer or architect. (The stamped seal requirement may be waived for accessory structures, decks and some alteration/additions.)
- Two copies of the site plan/survey indicating the location of the proposed structure. One copy must be an original stamped and signed survey of the property. (Copies of the survey may be accepted for accessory structures, decks and some additions.)
- The general contractor for the project shall provide a completed workers compensation insurance certificate or notarized exemption form.
- A copy of the appropriate sewer authority permit or Allegheny County septic permit (new dwelling units only). The following sewer authorities provide sewage disposal to the Township of Pine:

MTMSA  
P.O. Box 2063  
Warrendale, PA 15086  
(724) 935-6270

MTSA  
418 Arcadia Drive  
Pittsburgh, PA 15237  
(412) 366-3420

Breakneck Creek Regional  
Sanitary Authority  
1166 Mars-Evans City Road  
Mars, PA 16046  
(724) 625-1699

The following additional items may be required:

- PA Department of Environmental Protection permit for any stream crossing.
- PennDot Highway Occupancy Permits for driveways on State roads.
- Allegheny County Plumbing Department permit and/or electrical permit verification.
- Engineering reviews or certifications.

**Fees:**

The cost of the building permit is based on valuation of structures, determined by current building valuation data reports provided by the ICC or the builder's estimate, whichever is greater. See Fee Schedule for amounts.

**TOWNSHIP OF PINE**  
 230 PEARCE MILL ROAD  
 WEXFORD, PA 15090  
 (724) 625-1591

**PA State Uniform Construction Code  
 Plan Set Detail Requirements**

The following plan sheets shall be included with any submitted building permit application (some sheets may be omitted for minor additions and accessory structures as determined by the Code Official):

- Front, left, right, and rear elevations with proposed finished grade
- Foundation plan(s)
- First, second, third, etc. floor plan(s)
- Roof framing plan
- Wall section

Proposed truss or engineered floor or roof systems require the submission of the specific engineered drawings for the proposed truss/system.

Insulation and mechanical detail can be submitted in plan or narrative format.

The following detail shall be included with any plan set submitted with a building permit application (some detail may be omitted for minor additions and accessory structures):

**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

Ground Snow Load	Wind Speed	Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Underlayment Required	Flood Hazard	Air Freezing Index	Mean Annual Temp
			Weathering	Frost Line Depth	Termite					
25	90	A	Severe	36"	Mod/Heavy	10	Yes	Ordinance 235 10/16/95	1500 or less	50

**STRUCTURE**

- Footing and foundation type of construction, width, thickness, and reinforcing
- Stud, joist, and rafter size and spacing
- Steel and engineered beam/girder location and sizing
- Header locations and sizing
- Engineered floor, roof, or wall systems detail
- Window and door sizing and type of glazing

**MECHANICAL**

- Furnace unit(s) efficiency rating and fuel type

**ENERGY**

- Proposed R-values and type of insulation
- Window sizing and U-Factors
- *RESCheck* analysis report (if used) or energy analysis by third party
- Duct leakage test and blower door test option should be indicated

**PLUMBING/ELECTRICAL**

- To be submitted to the appropriate agency/inspector for review and approval (if required)

**TOWNSHIP OF PINE**  
230 PEARCE MILL ROAD  
WEXFORD, PA 15090  
(724) 625-1591

**PA State Uniform Construction Code  
Standard Residential Building Code Requirements for Construction**

The Building Permit applicant agrees to comply with the provisions of the Township of Pine Ordinances, Codes, and Regulations, and with all applicable laws and regulations of Allegheny County, Commonwealth of Pennsylvania and the United States, whether or not specified in these requirements.

**One business day notice is required to schedule inspection requests: (724) 625-1636.**

**Site Requirements:** Silt fence, trenched and staked, shall be installed at low sides of lot. Silt or barrier fence is required along street, a construction driveway of #3 stone shall be in place, and the building permit shall be posted and visible from the street. Any accumulated mud or debris shall be removed from the streets immediately. On lot dumpsters shall be utilized to contain construction debris. No open burning permitted.

**Failure to maintain on lot site requirements will result in the immediate shut down of construction activities until those items are brought into compliance.**

**Footings:** Trenches and forms shall be clean and free of any standing water. Footers for poured foundation wall systems shall contain rebar for wall tie in. All footers, which require drilling piles/caissons or placement on engineered fill, require additional approval(s) and engineering prior to the placement of concrete.

**Inspection Required.**

**Foundations:** All brick ledges shall be solid units or shall be fully grouted masonry. Damp/water proofing must be installed where required. Poured concrete foundation wall systems must be inspected prior to backfilling. All foundation drain lines must be inspected prior to backfilling. Construction debris is not permitted to be backfilled with the foundation. All construction debris must be placed in an approved container. Passive Radon mitigation piping system shall be installed and verified prior to basement slab concrete placement. **Inspection Required.**

**Sill Plates and Anchors:** Sill plates shall be treated lumber on solid termite blocks or sill sealer. Anchor bolts (minimum ½ inch) shall be spaced no greater than 12 inch from corners and sections and 6 foot on center. Sill plate anchors straps and manufactured connectors shall be spaced per manufacturer's specifications. **(Simpson MAB required spacing is 42 inch maximum.)** Builder is to verify the specific engineered connector that is to be used.

**Girders:** Steel girders and posts shall be sized/spanned per manufacturer's specifications for the span proposed. Micro-Lam and LVL header/girders shall be provided with a minimum of two Jack studs or to manufacturer's specifications. Steel post locations shall be provided with concrete footings. Bearing wall/ Pilaster locations shall be provided with concrete footings. A minimum of 3 inch of bearing shall be provided for all girders/beams to block/concrete. Pilasters and beam pockets shall be solid grouted.

**Joists and Engineered Lumber:** Floor and ceiling joists shall have a minimum of 1½ inch of direct bearing or be provided with ledgers or approved joist hangers nailed per manufacturer's specifications. Any cuts or modifications to any engineered joist system requires engineering approval from the manufacturer. Roof Truss systems require approved engineered connectors for connection to bearing wall plates.

**Fireblocking:** Solid fireblocking shall be provided at all ceiling to floor lines including tray ceilings. Open web floor trusses shall be fireblocked in areas no greater than 1000 square feet. Chimneys and mechanical chases shall be fireblocked at each floor level. All mechanical, electrical, and plumbing cuts through floor and ceiling members shall be draft stopped with an approved material. Garages shall be separated from any living space with a minimum ½ inch gypsum. Garages with habitable space above shall be separated from the living space above with a minimum of 5/8 inch Type X gypsum (SEE ICC CODE FOR SPECIFIC NAILING SCHEDULE REQUIRED)

**PA State Uniform Construction Code**  
**Standard Residential Building Code Requirements for Construction**

(Page 2)

**General Framing:** 2009 (ICC) International Residential Code applies. Attic access required in main hallway per local ordinance (22X54 pull down stair or 26X44 panels). Built up bearing side Headers with spans exceeding 5 foot require a minimum of two Jack Studs. Stairs treads shall be a minimum of a 9 inch cut with a rise no greater than 8-1/4 inch. Balustrade spacing shall not allow the passage of a 4 inch sphere. If engineered floor joists are exposed and no sprinkler system is installed then joists must be covered with 1/2" wallboard, 5/8" structural sheathing or equivalent material. **Inspection Required.**

**Plumbing and Electrical Installations:** All plumbing shall conform to the IPC, and Allegheny County Plumbing Code(s) and fire sprinkler systems are required in townhouses effective 1/12010. Allegheny County Plumbing department approves and inspects sprinkler systems. Electrical installations shall conform to the ICC electrical Code. Nail plates and fireblocking shall be installed where appropriate. **Allegheny County plumbing inspections required and Township approved electrical inspection required for rough in and final inspections.**

**Smoke Detectors and Carbon Monoxide Alarms:** 110-volt smoke detectors with battery back up shall be provided at each level, and within each bedroom. The smoke detectors must be interconnected so that when one is activated, all others activate also. In lieu of hard-wired smoke detectors, a monitored smoke/fire system may be installed in the locations, which meet or exceed the requirements for standard smoke detectors. Carbon monoxide alarms must be installed outside each sleeping room area in accordance with manufacture's installation instructions.

**Windows and Egress:** Each bedroom requires a direct egress door or at least one *window* with the required clear opening of 5.7 clear feet (**820 square inches**) with no less than 20 inch width or 24 inch in height and cannot be any greater than 44 inch above finished floor. (**Size is based on a single operating panel for double hung windows**). All basements shall be provided with direct egress to the outside. All glazing within building walls within 60 inch height of tubs and showers walking surface shall be safety glazing. All windows greater than 9 square feet and closer than 18 inch to a walking surface must be safety glazing. Any window adjacent to stair or stair landings shall be safety glazing. Any window adjacent to a door within 24 inch shall be safety glazing. Any proposed bedroom space in finished basements is subject to the same egress and smoke detector requirements.

**Wallboard:** 1/2 inch and 5/8 inch wallboard shall be fastened at 12 inch centers for ceiling and 16 inch centers for walls when applied **without** adhesive. 1/2 inch and 5/8 inch wallboard shall be fastened at 16 inch centers for ceiling and 24 inch centers for walls when applied **with** the use of adhesive. (*See IRC for nail use*) **Note: 5/8 inch wallboard required for garage ceilings shall be fastened at 6 inch centers minimum.**

**Insulation:** Energy packages shall comply with the simplified requirements as identified in the 2009 International Residential Code , Pennsylvania's Alternative Residential Energy Provisions OR and alternate energy analysis may be submitted for the specific structure. *See the energy requirements summary.* **Inspection Required. A permanent certificate shall be posted on electrical panel that identifies R-values, U-factors, and equipment installed.**

**General Mechanical Requirements:** All HVAC Equipment shall be installed per manufacturer's requirements. Combustion, return, and supply air shall be installed and provided as required by the International Mechanical Code. All utility controls and pressure/temperature relief devices shall be installed for inspection. Third party inspector should do duct leakage test. Blower door test should be done if option is chosen. **Inspection Required.**

**Concrete Slabs:** 4 inch minimum of compacted gravel required under all concrete slabs. Vapor Barrier and Rebar or W.W.F. required in garages. Vapor barrier required in all basements. #4 rebar or W.W.F. required in all street walks and driveways.

**Stormwater controls:** Dry sump pits required for all stormwater containment unless development lateral provided. No day lighting or tie-ins to stormwater catch basins permitted unless prior approval from the Township Engineer is granted. Sump pits shall not be permitted in fill areas. #4 stone and geotextile fabric required with appropriately sized pit. See Building Inspector for Specification Sheet. **Inspection Required.**

**Final/Occupancy:** Final plumbing and electrical inspections shall be verified complete and required inspection cards submitted. All features on the approved plans shall be complete. All access and egress features shall be installed. Grading, landscaping, concrete driveway and walkway installation shall be complete. Completed application and final lot survey must be submitted and approved prior to occupancy. **Inspection Required.**

**TOWNSHIP OF PINE**  
230 PEARCE MILL ROAD  
WEXFORD, PA 15090  
(724) 625-1591

**PA State Uniform Construction Code**  
**Residential Energy Requirements**

Simplified R-value and U-factor Requirements (Zone 5):

Max. Glazing	Ceiling value	Wall value	Floor value	Foundation	Slab value
<b>0.35</b>	<b>R-38</b>	<b>R-20 or 13+5</b>	<b>R-30</b>	<b>R-10/13</b>	<b>R-10, 2 feet</b>

In place of the simplified requirements noted above, compliance with the energy provisions of the UCC can be achieved by utilizing the *2009 Pennsylvania Alternative Residential Energy Provisions (PHRC) Worksheet – Central Zone*, or by submitting an energy analysis prepared by a licensed engineer or software analysis published by the United States Department of Energy (*RESCheck*).

**Notes:**

- Foundation wall is defined as having at least 50% of the wall below grade. Less than 50% of the wall below grade is not a foundation wall and shall meet the requirements for exterior walls.
- Slab Perimeter insulation shall extend 2 foot below or to the inside of the slab.
- Manufacturers R-values shall be marked on all insulation materials 12” wide or greater. Signed and dated certifications are accepted in place of marked insulation.
- Blown or sprayed insulation materials shall have depth markers at least every 300 square feet and shall be fixed to the rafters/trusses and shall face the attic access opening.
- Vapor barriers shall be required on the warm in winter side of exterior walls not ventilated for moisture control.
- A permanent certification shall be posted on or in the electrical panel. The certification shall list the R-values installed in or on ceiling/roof, walls, foundation, and ducts outside conditioned space; U-factors and type of efficiency of heating, cooling, and service water heating equipment.
- A minimum 50% of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.
- Duct leakage test are typically preformed at rough frame. If all ducts are located inside thermal envelope, then duct leakage test are not required.

Building permit applicants shall be required to submit detailed drawings identifying compliance with the energy provisions of the UCC. The following minimum details should be included.

1. Specific window sizing, manufacture, and u-factor
2. Proposed wall, ceiling, floor, foundation, and slab insulation R-Values
3. Proposed furnace efficiency
4. Specify which option chosen for air sealing requirements: visual inspection or blower door test

## Compliance Worksheet – Central Zone 2009 Pennsylvania Alternative Residential Energy Provisions

**PROJECT** Address \_\_\_\_\_  
 Contractor \_\_\_\_\_  
 Permit # \_\_\_\_\_  
 Date \_\_\_\_\_ Date of Plan \_\_\_\_\_

**Entrance requirements.** This compliance path permits some reductions in energy efficiency that will allow for simplified enforcement and construction. To provide for equivalent energy performance, the building owner or agent must choose one of the following energy enhancements:

Choose one	Description	Minimum efficiency
<input type="checkbox"/>	Ductless systems <sup>a</sup> or all air ducts located inside the thermal envelope	
<input type="checkbox"/>	On-site electric generation installed <sup>b</sup>	
<input type="checkbox"/>	HERS Index of 85 or less <sup>c</sup>	
<input type="checkbox"/>	Geothermal or water source heat pump installed	
<input type="checkbox"/>	Solar hot water system installed <sup>d</sup>	1.1 SEF
<input type="checkbox"/>	Improved efficiency air source heat pump installed	8.8 HSPF
<input type="checkbox"/>	Improved efficiency furnace installed	86 AFUE

- Notes: a. Electric resistance heat is not allowed in this option.  
 b. This option is limited to systems of 1 kW or larger and include combined heat and power systems, fuel cell systems or photovoltaic solar systems.  
 c. HERS rating is required to be performed by Residential Energy Services Network (RESNET) Certified Rater and shall include plan review, inspections and post-construction testing. The RESNET-Certified Rater must certify to the building official that the building has a HERS Index of 85 or less and that it complies with the requirements of this document.  
 d. SEF is a certified performance rating of the solar water heating system determined in accordance with the Solar Rating and Certification Corporation's OG-300 Protocol. The collectors for the system must be mounted with a tilt from horizontal of no less than 15 degrees and no more than 45 degrees, and have an azimuthal orientation of within 45 degrees of true south.

**Insulation and Fenestration:** The building thermal envelope shall meet or exceed the required criteria. Please fill in the actual R-values and U-factors for the various components.

	Fenestration U-factor	Skylights <sup>b</sup> U-factor	Ceiling <sup>i</sup> R-value	Wood frame wall R-value	Mass Wall R-value <sup>h</sup>	Floor R-value	Basement <sup>e</sup> wall R-value	Slab <sup>d</sup> R-value and depth	Crawlspace <sup>e</sup> wall R-value
Required	0.35	0.60	38	20 <sup>e</sup> or 13 + 5 <sup>g</sup>	13/17	30 <sup>f</sup>	10/13	10, 2 ft	10/13
Proposed									

- Notes: a. R-values are minimums. U-factors and solar heat gain coefficient (SHGC) are maximums. R-19 batts compressed into nominal 2 x 6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.  
 b. The fenestration U-factor column excludes skylights.  
 c. The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.  
 d. R-5 shall be added to the required slab edge R-values for heated slabs.  
 e. Low density spray applied foam and cellulose insulation in a 2x6 wall cavity shall be considered in compliance with this requirement.  
 f. Or insulation sufficient to fill the framing cavity, R-19 minimum. Floor insulation may also be reduced to R-19 if installed above an unconditioned basement.  
 g. "13 + 5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.  
 h. The second R-value applies when more than half the insulation is on the interior.  
 i. Cathedral ceiling minimum insulation is R-30.

**Air sealing and insulation.** Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options. Please indicate which option you will use:

- Testing option.** Tested air leakage is less than 7 ACH when tested with a blower door at a pressure of 50 pascals (0.007 psi) in accordance with ASHRAE 119 *Air Leakage Performance for Detached Single-Family Residential Buildings*. Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances. See PA304.2.1 for complete requirements.
- Visual inspection option.** The items listed in Table PA304.2.2, applicable to the method of construction, are field verified. Where required by the code official, an *approved* party independent from the installer of the insulation shall inspect the air barrier and insulation. See PA304.2.2 for complete requirements.

**Mechanical Systems:**

**Ducts Insulation.** Ducts shall meet or exceed the following insulation requirements.

Location	Minimum R-value
Supply ducts in attics	R-8
All other ducts outside, or integral to, the building thermal envelope	R-6
Portions of ducts located completely within the building thermal envelope	None

**Duct Sealing.** Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with IRC Section M1601.4. Please choose either Option 1 or 2 for duct tightness testing, or the exception if it applies.

- Option 1. Post-construction test:** Leakage to outdoors shall be less than or equal to 8 cfm (3.78 L/s) per 100 ft<sup>2</sup> (9.29 m<sup>2</sup>) of conditioned floor area or a total leakage less than or equal to 12 cfm (5.66 L/s) per 100 ft<sup>2</sup> (9.29m<sup>2</sup>) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa), including the manufacturer’s air handler. See PA402.2 for complete requirements.
- Option 2. Rough-in test:** Total leakage shall be less than or equal to 6 cfm (2.83 L/s) per 100 ft<sup>2</sup> (9.29 m<sup>2</sup>) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa), including the manufacturer’s air handler. See PA402.2 for complete requirements.
- Exception:** Duct tightness test is not required if the air handler and all ducts are located within *conditioned space*.

**Mechanical system piping insulation.** Mechanical system piping capable of carrying fluids above 105°F (40°C) or below 55°F (13°C) shall be insulated to a minimum of R-2.

**Circulating hot water systems.** All circulating service hot water piping shall be insulated to at least R-2. Circulating hot water systems shall include an automatic or *readily accessible* manual switch that can turn off the hot water circulating pump when the system is not in use.

**Lighting equipment.** A minimum of 50 percent of the lamps in permanently installed lighting fixtures shall be *high-efficacy lamps*.

**Compliance Statement:** The proposed building design described here is consistent with the building plan, specifications and other information submitted with the building permit application. Additionally, the building and its systems will comply with all requirements of the 2009 *Pennsylvania Alternative Residential Energy Provisions* ([www.engr.psu.edu/phrc](http://www.engr.psu.edu/phrc)).

\_\_\_\_\_  
Name – Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**TOWNSHIP OF PINE**  
230 PEARCE MILL ROAD  
WEXFORD, PA 15090  
(724) 625-1591

**PA State Uniform Construction Code**  
**Residential Inspection Schedule: New Construction**

The Building Permit Applicant agrees to comply with the provisions of the Township of Pine Ordinances, Codes, and Regulations, and with all applicable laws and regulations of Allegheny County, Commonwealth of Pennsylvania and the United States, whether or not specified in these requirements.

**One business day notice is required to schedule inspection requests: (724) 625-1636.**

**FOOTINGS:** Schedule inspection following forming and trenching and prior to concrete pour. Pre-Cast foundation systems require an inspection of soil conditions and stone base placement following excavation.

**FOUNDATIONS:** Schedule inspection following damp-proofing, French drain installation, and sill plate anchor installation and prior to any backfilling. Vertical reinforcing bars shall be left exposed for inspection. Pour concrete wall foundations require an additional inspection following forming and prior to the placement of concrete.

**GENERAL FRAMING:** Schedule rough frame inspection following rough-in electrical inspection, plumbing inspection, and mechanical installations and prior to the placement of insulation. If ducts are located outside envelope, duct leakage tests should be scheduled with verification submitted to Township.

**PLUMBING, MECHANICAL, AND ELECTRICAL:** Plumbing (Allegheny County inspection) and Electrical (Township approved electrical inspection agency) inspections should be scheduled with the appropriate agency/inspector as required. Mechanical inspections will be included with the general framing and final inspections.

**INSULATION/ENERGY:** Schedule insulation/energy inspection following insulation installation, window, and door installation, HVAC unit verification and prior to drywall/wallboard. Any proposed blown in attic insulation can be verified with the final occupancy inspection.

**WALLBOARD:** Schedule wallboard inspection following installation of, and prior to, tape and finish.

**STORMWATER:** Schedule inspection following pit excavation and stormwater leader installation and prior to any backfill.

Note: Development lateral connection shall be inspected.

**FINAL OCCUPANCY:** Submit occupancy application and schedule inspection when all required items are complete and application and final lot survey has been submitted. Air sealing/blower door tests results must be submitted if applicable. All required inspections shall be verified complete and approved.