



1130 N. Bethlehem Pike
Spring House, PA 19477
215.646.5302 (p) 215.646.3357 (f)

APPLICATION FOR PERMIT

(All below relevant fields must be filled out prior to submission)

Parcel Information (must be filled out for all work):

Address of work to be performed: _____

Property Type: Residential Commercial Zoning District: _____

Parcel Owner Name: _____

(copy of signed contract must be included with submission)

Parcel Owner Address: (if different than address listed above)

_____ Parcel Owner Phone: _____

Parcel Owner Email: _____

Contractor Information (current COI is required with each submission):

Business Name: _____ Contractor Name: _____

Business Address: _____

Business Phone: _____ Cell Phone: _____

Email: _____

HIC PA License #(residential work): PA _____ LGT Contractor License # (commercial work): C- _____

Architect/Engineer information:

Name: _____

Phone: _____ Email: _____

Electrical Permit Information:

Electrical Contractor Information (current COI is required with each submission)

Business Name: _____

Business Address: _____

LGT Current Master Electrician License #: EL-_____ Phone: _____

Email: _____ Cost of Work: \$_____

Description of Electrical Work to be Performed:

Electrical Inspection Agency **(all electrical plans must have a third-party stamp prior to submission)**:

- Middle Department Inspection Agency Middle Atlantic Electrical Inspections
- Code Inspections Bureau Veritas North America
- United Inspection Agency

I do hereby attest that the information provided on this application is true and that I am versed in the National Electric Code and the Lower Gwynedd Township Electrical Ordinance; further, I understand that I am responsible for meeting the requirements of these codes on all work performed in Lower Gwynedd Township.

Signature of Master Electrician: _____

Printed Name: _____ Date: _____

Approved By BCO: _____ Date: _____

Zoning Officer's Signature: _____ Date: _____

LGT Permit #: _____

Plumbing Permit Information:

Plumbing Contractor Information (current COI is required with each submission)

Business Name: _____

Business Address: _____

LGT Current Master Plumber License #: P- _____ Phone: _____

Email: _____ Cost of Work: \$ _____

BELOW FIXTURE TABLE MUST BE FILLED OUT:

FLOORS	YARD	BASEMENT	1 ST	2 ND	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH	9 TH	10 TH	TOTAL:
Toilets													
Bath Tubs													
Shower/Bath													
Lavatories													
Sinks													
Wash Tubs													
Slop Hopper													
Urinals													
Outlets													
Drainage Wells													
*\$35 Garbage Grinder													
*\$150 Ejector Pump													
Gas Line													
Water Heater													
BYPASS METER													

All proposed work under this application must be shown on plans and section. All vertical lines of soil, waste, leader and refrigerator pipes shall be designated by numbers or letters. A soil or waste line and its attendant vent line may be considered as one stack and so numbered or lettered. All work, materials and construction will be in accordance with the rules and regulations of the plumbing code. I do hereby attest that the information provided on this application is true, and that I am versed in the Lower Gwynedd Township Plumbing Ordinance; and further, I understand that I am responsible for meeting the requirements of these codes on all work performed in Lower Gwynedd Township

Approved By BCO: _____ Date: _____

Zoning Officer's Signature: _____ Date: _____ LGT PERMIT # _____

HVAC Permit Information:

RESIDENTIAL WORK: ATTACHED ACCA FORM AND MANUAL CALCULATION MUST BE SUBMITTED WITH YOUR APPLICATION

COMMERCIAL WORK: ALL INFORMATION REQUIRED TO DETERMINE CODE COMPLIANCE MUST BE PROVIDED WITH YOUR APPLICATION (Lower Gwynedd Contractor's License is required for all commercial work)

HVAC Contractor Information (current COI is required with each submission)

Business Name: _____

Business Address: _____

HIC PA License # (residential work): PA _____ LGT Contractor License #: C- _____

Phone: _____ Email: _____

Cost of Work: \$ _____

Description of HVAC Work to be Performed:

LGT PERMIT # _____

Permit Package Approved By BCO: _____ Date: _____
Zoning Officer's Signature: _____ Date: _____



Residential Plans Examiner Review Form for HVAC System Design (Loads, Equipment, Ducts)

Form
RPER 1.01
8 Mar 10

County, Town, Municipality, Jurisdiction
Header Information

Contractor _____
Mechanical License # _____
Building Plan # _____
Home Address (Street or Lot#, Block, Subdivision) _____

REQUIRED ATTACHMENTS¹

Manual J1 Form (and supporting worksheets):
or MJ1AE Form² (and supporting worksheets):
OEM performance data (heating, cooling, blower):
Manual D Friction Rate Worksheet:
Duct distribution system sketch:

ATTACHED

Yes No
Yes No
Yes No
Yes No
Yes No

HVAC LOAD CALCULATION (IRC M1401.3)

Design Conditions

Winter Design Conditions

Outdoor temperature _____ °F
Indoor temperature _____ °F
Total heat loss _____ Btu

Summer Design Conditions

Outdoor temperature _____ °F
Indoor temperature _____ °F
Grains difference _____ Δ Gr @ _____ % Rh
Sensible heat gain _____ Btu
Latent heat gain _____ Btu
Total heat gain _____ Btu

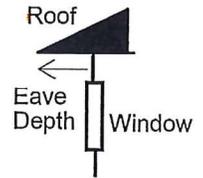
Building Construction Information

Building

Orientation (Front door faces) _____
North, East, West, South, Northeast, Northwest, Southeast, Southwest
Number of bedrooms _____
Conditioned floor area _____ Sq Ft

Windows

Eave overhang depth _____ Ft
Internal shade _____
Blinds, drapes, etc
Number of skylights _____



HVAC EQUIPMENT SELECTION (IRC M1401.3)

Heating Equipment Data

Equipment type _____
Furnace, Heat pump, Boiler, etc.
Model _____
Heating output capacity _____ Btu
Heat pumps - capacity at winter design outdoor conditions
Auxiliary heat output capacity _____ Btu

Cooling Equipment Data

Equipment type _____
Air Conditioner, Heat pump, etc
Model _____
Sensible cooling capacity _____ Btu
Latent cooling capacity _____ Btu
Total cooling capacity _____ Btu

Blower Data

Heating CFM _____ CFM
Cooling CFM _____ CFM

HVAC DUCT DISTRIBUTION SYSTEM DESIGN (IRC M1601.1)

Design airflow _____ CFM
External Static Pressure (ESP) _____ IWC
Component Pressure Losses (CPL) _____ IWC
Available Static Pressure (ASP) _____ IWC

Longest supply duct: _____ Ft
Longest return duct: _____ Ft
Total Effective Length (TEL) _____ Ft
Friction Rate: _____ IWC

Duct Materials Used (circle)
Trunk Duct: Duct board, Flex, Sheet metal,
Lined sheet metal, Other (specify) _____
Branch Duct: Duct board, Flex, Sheet metal,
Lined sheet metal, Other (specify) _____

ASP = ESP - CPL

Friction Rate = (ASP × 100) ÷ TEL

I declare the load calculation, equipment selection, and duct system design were rigorously performed based on the building plan listed above, I understand the claims made on these forms will be subject to review and verification.

Contractor's Printed Name _____ Date _____

Contractor's Signature _____

Reserved for use by County, Town, Municipality, or Authority having jurisdiction.

¹ The AHJ shall have the discretion to accept Required Attachments printed from approved ACCA software vendors, see list on page 2 of instructions.

² If abridged version of Manual J is used for load calculation, then verify residence meets requirements, see Abridged Edition Checklist on page 13 of instructions.



Residential Energy Efficiency Worksheet – 2018

2015 IRC, 2015 IECC & PA Alternative Residential Energy Provisions

Address of Project: _____ Building Permit #: _____

Print Name-Title: _____ Signature: _____ Date: _____

PA UCC Energy Compliance Path (Check One)

- 1. Pennsylvania Alternate Energy Provisions – Choose Entry Option on Page #2
- 2. IRC Chapter 11
- 3. IECC – Chapter 4
- 4. Above Code Program -REScheck or other: _____

Insulation and Fenestration Requirements by Component (PA Alternate & IRC Chapter 11)

Wood Frame Walls (R-value)	R-20 cavity or R-13 cavity + R-5 insulated sheathing
Ceilings with Attic Space (R-value)	R-49 (R-38 approved if not compressed over wall top plates)
Ceilings without Attic Space (R-value)	R-30 where roof/ceiling assemblies do not allow R-38 <u>Limited to lesser of 500 square feet or 20% of area - IRC only</u>
Floors (R-value)	R-30 (or insulation to fill framing cavity, min R-19) R-19 permitted in basement floors per PA Alt.
Basement Walls (R-value)	IRC R-15 continuous insulation or R-19 cavity insulation PA Alt. R-10 continuous insulation or R-13 cavity insulation
Crawl Space Walls (R-value)	IRC R-15 continuous insulation or R-19 cavity insulation PA Alt. R-10 continuous insulation or R-13 cavity insulation
Unexcavated Foundation (R-value)	R-10 to a depth of 2 feet (add R-5 if slab heated)
Mechanical System Piping	R-3 HVAC piping <55 deg or > 105 deg
HVAC Duct Insulation	Attic Ducts R-8 for 3” diameter & greater, R-6 less than 3” Other Ducts R-6 for 3” diameter & greater, R-4.2 less than 3” No insulation required for ducts completely inside thermal envelope
Window & Door (U-factor)	0.32 maximum (15 sqft. window exemption) <u>(Opaque Door Exemptions - 24 sq. ft. IRC, 54 sq. ft. PA Alt.)</u>
Thermally Isolated Sunroom	R-24 Ceilings, R-13 Walls, 0.45 Glazing U-factor
Recessed Lights in Thermal Envelope	IC rated and <i>labeled</i> ASTM E283
Lighting Equipment	Minimum 75% high-efficacy lamps in permanent light fixtures

Air Leakage – Building Thermal Envelope. Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options. **Testing does not apply to additions & alterations.**

- Testing of Building Thermal Envelope.** Tested air leakage is less than **5 ACH** when tested with a blower door at a pressure of 50 Pascals (0.007 psi) in accordance with RESNET/ICC380, ASTM E779 or ASTM E1827. 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 IRC Section N1102.4.1.2 or PA Alt. 304.1.2 for complete requirements.
- Approved Testing Agency (RESNET Certified or BPI Envelope Specialist) providing evidence of blower door testing or Contractor performing testing with Lower Gwynedd Township Code Official present

Duct Sealing. Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with the 2015 IMC or IRC Section M1601.4.1.



Residential Energy Efficiency Worksheet – 2018

2015 IRC, 2015 IECC & PA Alternative Residential Energy Provisions

Duct Testing. Please choose either Option 1, 2a or 2b for duct tightness testing, or the exception if it applies. Choose one of the following: (duct testing applies to additions and alterations only when new HVAC system(s) installed)

Rough-In Test Options. (Partial system testing is not permitted. i.e. ducts in exterior walls)

- Option 1a. **Rough-in test (Air handler installed):** Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 sq.ft. (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa). IRC Section N1103.3.4 or PA Alternative Section 402.3
- Option 1b. **Rough-in test (no air handler):** Total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 sq.ft. (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 w.g. (25 Pa). IRC Section N1103.3.4 or PA Alternative Section 402.3

Post Construction Test Option. (Partial system testing is not permitted. i.e. ducts in exterior walls)

- Option 2. **Post-construction test (Air handler installed):** Total leakage less than or equal to 4 cfm (113.3 L/min) per 100 sq. ft. (9.29m²) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa). IRC Section N1103.3.4 or PA Alternative Section 402.3
- Approved Testing Agency (for example: RESNET Certified, BPI Envelope Specialist) providing evidence of duct testing or Contractor performing duct testing with Lower Gwynedd Township Code Official present
- Conditioned Floor Area Square Footage _____
- Exception: Duct tightness test is not required if the air handler and all ducts (supply & return) are located within conditioned space. Ducts located in exterior walls are not within conditioned space.** When ducts are installed in exterior walls, duct testing is required.
- PA – Alternate Residential Provisions Entrance Requirements (Chose One)**

<input checked="" type="checkbox"/>	Option	Description	Minimum efficiency	
			Climate Zone (4)	
	1	Ductless heat pumps	8.5 HSPF	
	2	All air ducts located inside the thermal envelope	Compliant	
	3	Solar photovoltaic system installed	1.4 kW	
	4	Geothermal or water source heat pump installed	Compliant	
	5	Improved efficiency air source heat pump installed	8.7 HSPF	
	6	Improved efficiency furnace installed	90 AFUE	
	7	Exterior continuous insulation	R20+10	
	8	Improved airtightness	3.0 ACH50	
	9	Improved efficiency windows	U-factor = 0.25	
	10	Package: Improved efficiency windows and higher attic R-value with raised heel truss ^a	Windows	U-factor = 0.27
			Attic	R-value = 60
	11	Package: Improved efficiency windows and heat pump water heater	Windows	U-factor = 0.27
			Heat Pump Water Heater	Compliant

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