

RESIDENTIAL

Submittal Package



Lake County, Ohio

Lake County Building Department

27 Woodland Rd

Painesville, Ohio 44077

440-350-2636

www.lakecountyoio.gov/buildinginspection

Find us on Facebook & Twitter

Administration & Standards

The Lake County Building Department is responsible for the administration and enforcement of the applicable State of Ohio Building codes for residential, commercial, and industrial construction in its **jurisdictions**. These Building Codes provide the department's inspectors with guidelines to help ensure the health and welfare of the residents. Certified by the State of Ohio, the Building Department provides plan reviews, inspection services, and building, electrical, mechanical and fire protection code information.

JURISDICTIONS

Concord Township

Fairport Harbor Village

Grand River Village

Kirtland City

Kirtland Hills

Lakeline Village - Residential Only

Leroy Township

Madison Township

Madison Village

Mentor-on-the-Lake

Painesville Township

North Perry Village

Perry Township

Perry Village

Timberlake Village - Residential Only

Waite Hill- Residential Only

Wickliffe - All Commercial and Residential
Electric Only

Willoughby Hills - Commercial Only

Willowick



Lake County, Ohio

LAKE COUNTY BUILDING DEPARTMENT
27 WOODLAND ROAD, PAINESVILLE, Ohio 44077
TEL: 440-350-2636 440-918-2636 800-899-LAKE Ext. 2636 FAX: 440-350-2660
www.lakecountyohio.gov/buildinginspection

CONTRACTOR REGISTRATIONS

- Contractors must register annually using the appropriate form provided by the Lake County Building Department -bonding and insurance is not required.
- Contractors need to check with the local jurisdiction where they are working for any requirements at the local level.
- The following contractors are registered annually (January -December) at a fee of \$115:
 - **General**
 - **Electrical** - requires copy of State of Ohio Electrical License
 - **HVAC** - requires copy of State of Ohio HVAC License
 - **Commercial Gas Piping** - requires copy of State of Ohio HVAC or Plumbing License
 - **Residential Gas Piping** - requires copy of current registration with another City / County Building / Health Dept or State of Ohio HVAC or Plumbing License
 - **Hydronics** - requires copy of State of Ohio Hydronics License
 - **Refrigeration** - requires copy of State of Ohio Refrigeration License
 - **Fire Alarm** - requires copy of Company Annual Certificate from State Fire Marshal
 - **Fire Sprinkler** - requires copy of Company Annual Certificate from State Fire Marshal
 - **Hood Suppression** - requires copy of Company Annual Certificate from State Fire Marshal



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Lake County, Ohio

PERMIT INFORMATION

BUILDING: A building permit shall be obtained before proceeding with any construction, alteration, repair, moving, or demolition of any structure, deck, swimming pool, etc.

SEPARATE PERMITS Shall Be Obtained for the Following: Electrical, HVAC, Gas Piping, Hydronics, Fire Alarm, Fire Sprinkler, Kitchen Hood, Hood Suppression, Room Suppression, Refrigeration, and other equipment installations that are essential features in the construction or use of the structure.

Permits of any type will be issued only after compliance with the Residential Code of Ohio or the Ohio Building Code and only on evidence of an approved Zoning Permit, Lake County Engineer/Stormwater Management Approval, Sanitary Sewer or Septic Approval, Soil & Water Approval, and an approved Water Supply, if applicable.

The proposed work must be done in accordance with approved plans, specifications, codes, and standards.

It is the duty of the General Contractor/Applicant to insure that all required inspections are scheduled and all work installed has been approved by the Lake County Building Department prior to proceeding to the next phase of construction. The General Contractor/ Applicant is responsible to obtain a final inspection at the completion of the project.

Permits become null and void if work or construction authorized is not commenced within 12 months, or if construction or work is suspended or abandoned for a period of 180 consecutive days at any time after work is commenced.

PLUMBING PERMITS must be obtained from the Lake County General Health District, Telephone: 440-350-2543.

TWENTY-FOUR (24)-HOUR NOTICE is required for ALL INSPECTIONS. Inspection requests must be received by 3:00 p.m. for an inspection the next day. You can call on the day of your inspection, between 8:00 a.m. -9:15 a.m. for an approximate inspection time.

APPROXIMATE TIME OF INSPECTION: You can call on the day of your inspection, between 8:00 a.m. -9:15 a.m. for an approximate inspection time.

REINSPECTION FEES-A re-inspection fee will be charged when the inspector must return to work that was not ready, building was locked, approved prints not on site, and / or had failed a previous inspection. Fee must be paid prior to scheduling final inspection, or if two (2) fees are assessed on a project, fees are due before the next inspection is scheduled.

SUBMITTING FOR A RESIDENTIAL BUILDING PERMIT

1. SUBMIT (2) TWO COMPLETE SETS OF PLANS along with a completed Application for Residential Building Permit Plan Review. A submittal fee is required to be paid upon submittal of plans.
2. Buildings or structures located in flood hazard areas must contact the Lake County Engineer's Office before applying for a building permit.
3. All plans submitted shall bear sufficient information such as indicating the location, nature and extent of the work proposed to determine compliance with the Residential Code of Ohio (RCO). Drawings shall be dimensioned and drawn upon suitable material to clearly indicate clearly the principle use of the building or structure. The floor area for such uses shall be clearly shown on plans.

Each set of plans shall include the following:

- A. Job address and other information: The job site address shall appear on all sheets/pages of the set of plans. Each sheet/page of the set of plans shall be identified by sheet number.
- B. General: The plans shall reflect the orientation of the building as shown on the site plan. Plans reflecting a reverse orientation will not be accepted. The plans shall be specific and show only information relative to the actual construction. Details, layouts and construction options not related to the actual construction shall not be shown or shall be clearly demarcated to indicate they are not related to the project construction. These conditions are grounds for not approving the plans or inspections.
- C. Site Plan: A site plan showing a north orientation arrow, the size and location of new residential construction and all existing structures on the site, all property and interior lot line locations with setback and side yard dimensions and distances from buildings to lot lines, the locations of the nearest streets, the established street grades, the locations, types and sizes of all utility lines, the location of any fences, and the elevations of all proposed finished grades; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot.
- D. Index: Index of all drawings must be located on the first sheet if the set of plans.

- E. Floor Plans: Complete floor plans, including plans of full or partial basements and full or partial attics. Floor plans must show all relevant information such as door swings, stairs and ramps, windows, shafts, all portions of the means of egress, etc., and shall be sufficiently dimensioned to describe all relevant space sizes. Wall materials shall be described by cross-hatching (with explanatory key), by notation, or by other clearly understandable method. Spaces must be identified by how each space is intended to be used.
- F. Exterior Wall Envelope: The residential construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, comers, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive membrane, all elevations necessary to completely describe the exterior of the residential building including floor to floor dimensions, and details around openings. See the 2013 RCO Energy Compliance Declaration Form.
- G. Sections: Cross sections, wall sections, details including typical connections as required to fully describe the residential building construction showing wall, ceiling, floor and roof materials. Residential construction documents shall describe the exterior wall envelope in sufficient detail to determine compliance with the RCO.
- H. Structure: Complete structural description of the residential building including size and location of all structural elements used in the design of the residential building and other data as required to fully describe the structural system.
- I. Rating: The fire-resistance ratings of all structural elements as required by this code, data substantiating all required fire-resistance ratings including details showing how penetrations will be made for electrical, mechanical, plumbing, and communication conduits, pipes, and systems, and the materials and methods for maintaining the required structural integrity, fire-resistance rating, and firestopping.
- J. System Descriptions: Description of the mechanical, plumbing and electrical systems, including: materials; location and type of fixtures and equipment; materials, and sizes of all ductwork; location and type of heating, ventilation, air conditioning and other mechanical equipment and all lighting and power equipment. See the 2013 RCO System Descriptions Form.
- K. Additional Information: Additional graphic or text information as may be reasonably required by the residential building official to allow the review of special or extraordinary construction methods or equipment.
- L. Manufacturer's Installation Instructions: As required by this code, shall be available on the job site at the time of inspection.

- M. Amended (Revised) Construction Documents: If substantial changes to the residential building are contemplated after first document submission, or during construction, those changes must be submitted in duplicate with an Application for Residential Building Permit Plan Review to the Lake County Building Department for review and approval.
4. ZONING PERMIT - Check with the local zoning inspector for requirements. Bring a copy of the zoning permit to the Building Dept if required. If a Zoning permit is not required please provide the name and number of the person you spoke to.
 5. SITE PLANS - Submit required number of site plans to the local zoning inspector, Lake County Soil & Water, Lake County Engineer/Stormwater Management, Lake County Health District, and the Lake County Utilities for approvals, if necessary.
 6. WATER SUPPLY (for new dwelling) – If public water is not available, the applicant must supply acceptable evidence that an adequate supply of potable water is available. A well log approved by the Lake County Health District will be acceptable.
 7. SANITARY SEWERS/ SEPTIC SYSTEMS (for new dwellings) –If public sanitary sewers are not accessible, an individual disposal system must be installed in accordance with the Ohio State and County Health District's requirements. Contact the Lake County Health District. If a septic system is to be installed, the Lake County Health District (See Item # 11) must approve the grade/site plan.
 8. LAKE COUNTY DEPARTMENT OF UTILITIES SEWER & WATER AVAILABILITY NOTICE FORM (for new dwellings) signed by the Lake County Utilities Department.
 9. LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT (for new dwellings) - Submit a copy of the Approval Letter from the Lake County Soil and Water District if applicable.
 10. LAKE COUNTY ENGINEER / STORMWATER MANAGEMENT DEPT (for new dwellings) - Approval stamped on site plan (See Item # 11) if applicable
 11. SUBMIT A SITE PLAN with all required approvals **ON ONE SITE PLAN**: Lake County Engineers / Stormwater Management, Lake County Soil & Water District, and the Lake County Health District, if applicable.
 12. STATE 1% PERCENT FEE: Pursuant to 3781.102 (F) (2) of the Ohio Revised Code all residential permits and plan reviews shall be charged a 1% state tax.

PLUMBING PERMITS must be obtained from the Lake County General Health District, Tel: 440-350-2543.

Electronic Plan Submittal Guidelines for Residential Submittals Only

- Plans submitted electronically must be in original single layer Adobe PDF format (no scans). A submittal fee must be paid by check via mail or hand delivered with cash to the Building Department before plans can be reviewed. (Submittal Fees - New Dwelling - \$100, Additions/Alterations - \$50, All others -\$25) Other information pertaining to the submittal (zoning permit, etc.) shall be included with the documents in a separate PDF.
- Plans shall be submitted as a complete set (one attachment). Include a title sheet or index listing all pages provided with the submittal. Each page shall be oriented in the upright position. Each page shall include the seal of the design professional if applicable. Please indicate the total number of pages included in the set (***the maximum total number of pages is 20***).
- The submission needs to be sent as an ***unsecured*** PDF, as we will provide the review result along with our typical county informational stamp; including the date of approval. We also will insert our logo stamp on each page of the set and secure the documents prior to forwarding the documents to the submitter.
- The submitter will be notified of their adjudication or certificate of plan approval by e-mail correspondence, including associated building permit fees.
- The submitter is responsible to print the reviewed documents and provide (post) a complete, readable set for the jobsite and county field inspection personnel prior to commencing construction. Digital viewing of plans is acceptable but it is the permit holder's responsibility to provide appropriate provisions on-site for viewing the approved documents during inspections. Many projects require numerous submittals / revisions during the course of construction; therefore, it is imperative that all updates be forwarded to our office for timely review and approval to avoid unnecessary delays during construction and are available to contractors and county personnel.

If you are building in the following areas you must contact Lake County Soil & Water District located at 125 East Erie Street, Painesville, 440-350-2730.

Before we can issue a building permit we will need either soil and water's approval letter or an exemption stamp on the site plan.

CONCORD TOWNSHIP
FAIRPORT HARBOR VILLAGE
KIRTLAND CITY
LEROY TOWNSHIP
MADISON TOWNSHIP
MENTOR ON THE LAKE
NORTH PERRY VILLAGE
PAINESVILLE TOWNSHIP
PERRY TOWNSHIP
PERRY VILLAGE
WAITE HILL VILLAGE
WICKLIFFE
WILLOUGHBY HILLS

If you are building in the following areas you must contact Lake County Engineer/Stormwater management department located at 550 Blackbrook, Painesville, 440-350-2770.

Before we can issue a building permit we will need the engineer/stormwater managements' approval stamp on the plan.

CONCORD TOWNSHIP
GRAND RIVER VILLAGE
LEROY TOWNSHIP
KIRTLAND CITY
KIRTLAND HILLS
LAKELINE
MADISON TOWNSHIP
MADISON VILLAGE
MENTOR ON THE LAKE
PAINESVILLE TOWNSHIP
PERRY TOWNSHIP
PERRY VILLAGE
TIMBERLAKE VILLAGE
WILLOUGHBY HILLS
WILLOWICK

LOCAL ZONING OFFICES

Concord Township
7229 Ravenna Road
Concord Twp OH
44077 440-354-7510
x106

Madison Township
2065 Hubbard Road
Madison OH 44057
440-428-1120

Timberlake Village
11 Eastshore
Boulevard
Timberlake OH 44095
440-475-1763

Fairport Harbor Village
220 Third Street
Fairport Harbor OH
44077 440-352-3620

Madison Village
126 West Main Street
Madison OH 44057
440-428-7526

Waite Hill
7215 Eagle Road
Waite Hill OH 44094
440-942-1612

Grand River Village
205 Singer Avenue
PO Box 663
Grand River OH 44045
440-357-5222

Mentor-on-the-Lake
5860 Andrews Rd
Mentor on the Lake
OH 440-257-7216

Wickliffe
28730 Ridge Road
Wickliffe OH 44092
440-943-7115

Kirtland City
9301 Chillicothe Rd
Kirtland OH 44094
440-256-3332

Painesville Township
55 Nye Road
Painesville OH 44077
440-352-1443

Willoughby Hills
35405 Chardon Road
Willoughby Hills OH
44094 440-975-3550

Kirtland Hills
8026 Chillicothe Road
Kirtland Hills OH 44060
440-974-9090

North Perry Village
4449 Lockwood Road
N. Perry Village OH
44081
440-259-4994

Willowick
31230 Vine Street
Willowick OH 44095
440-516-3000

Lakeline Village
33801 Lake Shore Blvd
Lakeline OH 44095

Perry Township
3740 Center Road
Perry OH 44081
440-259-5140

Leroy Township
7971 Lester Drive
Leroy Twp OH 44077
440-220-0430

Perry Village
3758 Center Road
Perry OH 44081
440-259-2671



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APPLICATION FOR RESIDENTIAL BUILDING PERMIT PLAN REVIEW

DATE OF SUBMISSION: _____

**READ THE FOLLOWING INSTRUCTIONS AND INFORMATION
BEFORE COMPLETING THIS TWO (2) PAGE FORM**

1. All submittals must include TWO (2) complete sets of drawings including plot plan and a complete description of all work to be performed. There is also a plan submittal fee (See fee sheet or call the Building Dept.)
2. All plans submitted shall bear sufficient information to determine compliance with the Residential Code of Ohio. Drawings shall also indicate clearly the principle use of the building or structure. The floor area for such uses shall be clearly shown on plans.
3. Drawings must include elevations, floor plans, elevator enclosures, complete wall sections showing footer, foundation, floor, walls, and roof construction indicating all structural members, size, spacing, material, etc.
4. The proposed work must be done in accordance with approved plans, specifications, codes, and standards. **Separate permits which may be required for the proposed project include: electrical, HVAC, hydronics, and gas piping (these fees can be paid by the general contractor at the time the initial building permit is issued). HOWEVER, YOU ARE STILL RESPONSIBLE FOR HAVING YOUR SUBCONTRACTORS COMPLETE & SUBMIT THE APPROPRIATE PERMIT APPLICATIONS.** Additionally, separate drawings, approvals and fees that may be needed include fire sprinkler. All plumbing permits and inspections must be obtained from the Lake County General Health District, Ohio Tel: 440-350-2543.
5. It is the duty of the general contractor-/ homeowner to insure that all required inspections are scheduled and all work installed has been approved by the Lake County Building Department prior to proceeding to the next phase of construction. **The general contractor / homeowner is responsible to obtain a final inspection at the completion of the project.**
6. This permit becomes null and void if work or construction authorized is not commenced within 12 months, or if construction or work is suspended or abandoned for a period of 180 consecutive days at any time after work is commenced.
7. I hereby certify that I have read and examined this application and that all information is true, accurate, and complete. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. I authorize the Lake County Building Department to enter this property for the purpose of site inspections for the duration of this project.
8. **FALSIFICATION OF A PUBLIC DOCUMENT IS A VIOLATION OF THE OHIO REVISED CODE, SECTION 2921.13(A)(5), A MISDEMEANOR OF THE FIRST DEGREE, PUNISHABLE BY UP TO SIX (6) MONTHS IMPRISONMENT AND A FINE OF \$1,000 OR BOTH.**
By signing this application you and the entity you represent are agreeing to be obligated and pay for any additional review time and other fees associated with this project. You are further agreeing that failure to pay within 30 days of being billed may result in legal action and refusal of all future applications or permits until your account is brought current.

HOMEOWNER:

PRINTED NAME: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
TEL# () _____ FAX# () _____
EMAIL: _____

GENERAL CONTRACTOR: (If different than homeowner)

PRINTED NAME: _____
SIGNATURE: _____
NAME OF FIRM: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
TEL# () _____ FAX# () _____
EMAIL: _____

LAKE COUNTY BUILDING DEPARTMENT

APPLICATION FOR RESIDENTIAL BUILDING PERMIT PLAN REVIEW

READ INSTRUCTIONS BEFORE COMPLETING FORM - Page 1 of 2 – PLEASE PRINT OR TYPE

DATE SUBMITTED: _____

STREET ADDRESS OF CONSTRUCTION: _____ S/L # _____

CITY/TOWNSHIP: _____ PERM PARCEL #: _____

PROJECT TYPE: (Check all that apply)

New Dwelling

Addition

Alteration

Accessory Structure

Deck

Basement w/plumbing w/o plumbing

Crawl Space

Slab

Demolition

Frame

Brick

Pool

Finished Basement

Change of use

Garage car Attached Detached

Other _____

NUMBER OF STORIES _____

NUMBER OF FIREPLACES _____ FIREPLACE TYPE _____ WOODBURNER _____ HEATING SYSTEM _____

FUEL TYPE _____ NUMBER OF FUEL PIPING OUTLETS _____

IS CONSTRUCTION IN THE FLOODPLAIN YES NO

FIRE PROTECTION SYSTEM: Fire Sprinkler None Partial Total

EST CONSTRUCTION COST: _____ ZONING PERMIT #: _____

WELL OR PUBLIC WATER: _____ APPROVED WELL LOG #: _____

UTILITIES APPROVAL DATE: _____ SEPTIC APPROVAL DATE: _____

STORMWATER APPROVAL DATE: _____ SOIL & WATER APPROVAL DATE: _____

PROPOSED STRUCTURE:

DETAILED WORK DESCRIPTION: _____

NEW DWELLINGS

Square Footage

1st Floor _____

2nd Floor _____

Finished Basement _____

Attached Garage Sq Ft _____

Covered Porch(es) _____

Covered Deck(s) _____

TOTAL _____ SQ FT

ADDITONS, ALTERATIONS, MISC

Square Footage

1st Floor _____

2nd Floor _____

Finished Basement _____

TOTAL _____ SQ FT

Lake County Department of Utilities Sewer and Water Availability Notice

The following property or properties have been reviewed for the availability of water or sanitary sewer service only:

Contractor: _____

Subdivision: _____ City/Twp: _____

<u>Property Address</u>	<u>Parcel Number</u>	<u>Lot Number</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FOR UTILITIES OFFICE USE ONLY

Lake County Utility Services Available

- L.C.D.U. Sanitary Sewer Service is available for the above property or properties
- L.C.D.U. Domestic Water Service is available for the above property or properties

Lake County Utility Services NOT Available

- L.C.D.U. Sanitary Sewer Service is NOT available for the above property or properties
- L.C.D.U. Domestic Water Service is NOT available for the above property or properties

Comments: _____

Utility Services from Alternate Provider

- Sanitary Sewer Service may be available from an alternate service provider
- Domestic Water Service may be available from an alternate service provider

Reviewed By: _____ Date _____

Lake County Department of Utilities Fax Number: (440) 350-5784. Lake County Building Department Fax Number: (440) 350-2660

2013 Residential Code of Ohio (RCO) Systems Description Form

Applicant/General Contractor: _____ Homeowner: _____

Office Phone # _____ Cell Phone # _____ Homeowner Phone # _____

Project Description: _____

Address of Project: _____ City/Township: _____

Electrical System Description a,b

Service Size (Amps)	Size of Service Entrance Conductors	Panel Location(s)	Number of Sub-Panels	Location
<input type="checkbox"/> 100 Amp <input type="checkbox"/> 200 Amp <input type="checkbox"/> Over 200 Amp				<input type="checkbox"/> Overhead <input type="checkbox"/> Underground

a. Provide a detailed electrical diagram for services over 200 amps for review and approval (see electrical fee schedule).

b. Provide detailed electrical and gas piping diagrams for generator installations (see electrical fee schedule).

HVAC System Description

Heating Equipment Type, Size & Efficiency	Design Heat Loss (Btu/h)	Type of Fuel	Location of Equipment
<input type="checkbox"/> Forced Air Btu/h _____ Eff. _____ <input type="checkbox"/> Boiler Btu/h _____ Eff. _____ <input type="checkbox"/> Heat Pump Btu/h _____ Eff. _____ <input type="checkbox"/> Electric kW _____ Eff. _____ <input type="checkbox"/> Geothermal kW (Btu/h) _____ Eff. _____		<input type="checkbox"/> Natural Gas <input type="checkbox"/> LP <input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Other_	<input type="checkbox"/> Basement <input type="checkbox"/> Attic <input type="checkbox"/> Closet <input type="checkbox"/> Crawl Space <input type="checkbox"/> Outdoor

Cooling Equipment Type, Size & Efficiency	Design Heat Gain (Btu/h)	Location of Equipment
<input type="checkbox"/> AC Btu/h _____ Eff. _____ <input type="checkbox"/> Heat Pump Btu/h _____ Eff. _____ <input type="checkbox"/> Geothermal kW(Btu/h) _____ Eff. _____		<input type="checkbox"/> Outdoor <input type="checkbox"/> Other_
Area of Conditioned Space (sq. ft.)	Duct Size (Supply and Return)	

Fuel Gas System Description

Number of Fuel Gas Outlets	Size of Fuel Gas Main	Piping Materials
		<input type="checkbox"/> Steel Pipe Sch. 40 <input type="checkbox"/> CSST <input type="checkbox"/> Other_



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Residential Energy Efficiency Compliance Declaration Form

JOB SITE ADDRESS: _____

2013 Residential Code of Ohio (RCO) 1101.2 Compliance

Compliance shall be demonstrated by meeting the requirements of one of the following options:

1. The "International Energy Conservation Code" (IECC); or
2. 2013 RCO Sections 1101 through 1104, Prescriptive Method; or
3. 2013 RCO Section 1105 - "The Ohio Home Builder's Association (OHBA) Alternative Energy Code Option"

Applicant shall indicate the energy compliance option below:

Check One Option below

1. **2009 International Energy Conservation Code (IECC)**

Check one of the following: NOTE: 2011 IECC 403.2.2: Duct leakage (tightness) testing & verification report required if air handler or ducts are not located within conditioned space.

- REScheck based on the 2009 IECC
- Prescriptive method based on 2009 IECC Table 402.1.1
- Prescriptive method based on U- Factor alternative 2009 IECC 402.1.3
- Prescriptive method based on Total UA alternative 2009 IECC 402.1.4
- Simulated performance alternative 2009 IECC 405

Then, check one of the following: (for building envelope air tightness and insulation installation).

- Testing option per 402.4.2.1 (blower door)
- Visual inspection option per 402.4.2.2 (third party inspection)

2. **2013 RCO Sections 1101-1104, Prescriptive Method**

Note: RCO Section 1103.2.2: Duct leakage (tightness) testing & verification report required if air handler or ducts are not located within conditioned space.

3. **2013 RCO Section 1105 "The Home Builder's Association (OHBA) Alternative Energy Code Option" ***

* Effective January 1, 2014 2013 RCO 1105.2.4.2.1 Air leakage testing (blower door) & verification report required.
2013 RCO 1105.3.2.2: Duct leakage (tightness) testing & verification report required.

Duct leakage (tightness) testing & verification report required if air handler or ducts are not located within conditioned space.

Check one of the following:

- Compliance Path #1
- Compliance Path #2



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BUILDING ENVELOPE TIGHTNESS TEST VERIFICATION FORM

For compliance with the 2013 Residential Code of Ohio (RCO) Section 1102.4.2.1 and Section 1105.2.4.2.1
 and
 2009 International Energy Conservation Code (IECC) Section 402.4.2.1

JOB SITE ADDRESS: _____
Street Address & City/Township

Instructions: This form (*fillable pdf*) shall be used to report the Building Envelope Tightness test results to the Lake County Building Department. This form shall not be used to report the "air exchange rate" where the energy efficiency of the building is based on the standard reference design and proposed design provisions of IECC Section 405: Simulated Performance Alternative. The "air exchange rate" shall be reported in the compliance report required by IECC Section 405.4.2.

Enter the street address of the test above, indicate below the testing pressure and the Air Changes per Hour (ACH), and (check) Yes = "Y" or No = "N" to the list of conditions of the test.

Testing Pressure Pascals Air Changes per Hour (ACH):

CONDITIONS OF THE TEST		
Y	N	Check the Yes = "Y" or No = "N" column to <u>ALL</u> of the following questions:
		1. Exterior windows and doors, fireplace and stove doors were closed, but not sealed;
		2. Dampers were closed, but not sealed; including exhaust, intake, makeup air, back draft, and flue dampers;
		3. Interior doors were open;
		4. Exterior openings for continuous ventilation systems and heat recovery ventilators were closed and sealed;
		5. Heating and cooling system(s) were turned off;
		6. HVAC ducts were not sealed; and
		7. Supply and return registers were not sealed.

I verify the test results and conditions indicated above have been conducted per the above criteria, the Approved Plans, the Certification of Plan Approval, and the 2013 RCO or 2009 IECC as applicable. NOTE: This completed form is required to be submitted to the Lake County Building Department for review prior to requesting a Final inspection.

Verifier (Print Name): _____ Company: _____
 (Signature): _____ Address: _____
 Date: _____ City/State: _____
 Phone: _____



THIRD PARTY VISUAL INSPECTION FORM

ENERGY EFFICIENCY AIR BARRIER AND INSULATION INSPECTION CHECK LIST

For compliance with the 2013 Residential Code of Ohio (RCO) Section 1102.4.2.2 *Visual Inspection Option* and Table 1102.4.2 or 2009 IECC Section 402.4.2.2 *Visual Inspection Option* and Table 402.4.2

Job site Address: _____

✓ IN COMPLIANCE	COMPONENT	CRITERIA
<input type="checkbox"/>	Building Envelope	The correct building envelope insulation R-value and U-factor, fenestration U-factor, and duct system R-values, are installed.
<input type="checkbox"/>	Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
<input type="checkbox"/>	Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall, door, or drop down stair is sealed.
<input type="checkbox"/>	Walls	Corners and headers are insulated. Junction of foundation and sill plate is sealed. Correct R-value insulation and U-factor Fenestration is installed.
<input type="checkbox"/>	Windows and doors	Space between window/door jambs and framing is sealed.
<input type="checkbox"/>	Rim joists	Rim joists are insulated and include an air barrier.
<input type="checkbox"/>	Floors (including above garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of floor/insulation.
<input type="checkbox"/>	Crawlspace walls	Insulation is permanently attached to walls. Exposed earth in unvented crawlspaces is covered with Class I vapor retarder with overlapping joints taped.
<input type="checkbox"/>	Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
<input type="checkbox"/>	Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.
<input type="checkbox"/>	Garage separation	Air sealing is provided between the garage and conditioned spaces.
<input type="checkbox"/>	Recessed lighting	Recessed light fixtures are airtight, IC rated and sealed to drywall. Exception - fixtures in conditioned spaces.
<input type="checkbox"/>	Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
<input type="checkbox"/>	Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.
<input type="checkbox"/>	Electrical/phone boxes on exterior walls	Air barrier extends behind boxes or air sealed type boxes are installed.
<input type="checkbox"/>	Common wall	Air barrier is installed in common wall between dwelling units.
<input type="checkbox"/>	HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.
<input type="checkbox"/>	Fireplace	Fireplace walls include an air barrier.

By signing below, I verify the components listed above have been installed per the above criteria, the Approved Plans, the Certification of Plan Approval, and the 2013 RCO or 2009 IECC as applicable. NOTE: This completed form is required to be submitted to the Lake County Building Department for review prior to requesting a final inspection.

Verifier (Print Name): _____

Company: _____

(Signature): _____

Address: _____

Date: _____

City/State: _____

Phone: _____

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RESIDENTIAL FUEL PIPING PRESSURE ACCEPTANCE TEST CERTIFICATE

Test Certification shall be submitted to the Lake County Building Department PRIOR to final inspection (RCO 109.8). Any fuel piping systems regulated by the 2006 RCO will require the permit holder to complete this certificate in its entirety.

DATE OF TEST: _____

TIME OF TEST: _____

<u>PROPERTY OWNER</u>	<u>PIPING SYSTEM INSTALLER</u>
Name:	Company Name:
Address:	Address:
City/State/Zip Code:	City/State/Zip Code:
Telephone:	Representative:
Owner Contact:	State License #:
Telephone:	Telephone:
<u>TYPE OF FUEL - (NG) (LP) (OTHER) _____</u>	<u>PIPING SYSTEM MATERIAL(S)</u>
Test Medium:	(CHECK ALL THAT APPLY)
Working Pressure:	Steel Schedule 40:
Number of Fuel Outlets:	CSST:
Test Pressure:	Other:
Test Duration:	
Leak Test Performed? YES NO	
Piping system is bonded according to the 2006 RCO Section G2411 and if applicable the manufacture's installation requirements? YES NO	

I, hereby certify that the appropriate tests regarding the above system were performed in accordance with 2006 RCO Section G2417 code requirements and found to be compliant:

Date _____ (Sign Name) _____

(Print Name) _____

INSPECTION REQUIREMENTS

Page 1 of 4

- **JOB SITE ADDRESS** that is visible from the street and posted during entire construction project.
- **JOB PLACARD POSTED IN PLAIN SIGHT**
- **APPROVED JOB COPY CONSTRUCTION DOCUMENTS MUST BE AVAILABLE ON ALL JOBS FOR ALL INSPECTIONS.** If approved construction documents are not on the job site, a re-inspection must be scheduled – **PLEASE NOTE A RE-INSPECTION FEE WILL BE ASSESSED.**
- **RE-INSPECTION FEES** – A re-inspection fee will be charged when the inspector must return to work that was not ready, building was locked and inspector could not gain access, approved construction documents not on site, and / or had failed a previous inspection. Fee must be paid prior to scheduling final inspection, or if two (2) fees are assessed on a project, fees are due before the next inspection is scheduled.
- **SCHEDULING INSPECTIONS** – Twenty-four (24) hour notice is required for **all inspections**. Inspection requests must be received by 3:00 p.m. for inspection the next day. You can call the day of your inspection, between 8:00 a.m. – 9:00 a.m. for an approximate inspection time.

PLUMBING APPROVALS - In addition to receiving an inspection approval from the Lake County Building Department, IT IS THE CONTRACTOR'S/ OWNER'S RESPONSIBILITY to obtain all PLUMBING APPROVALS from the Lake County Health District, Telephone 440-350-2543. Covering or concealing work without proper inspections and approvals from both the Building and Health Departments is done at your own risk and removal of such covering or

- **FOOTING / PADS / PILING / POST HOLE INSPECTIONS:**
 - Upon completion of footing forms, reinforcement, etc. but **BEFORE PLACING CONCRETE** schedule a pre-pour inspection.
 - A minimum of a **ONE HOUR** window is required when scheduling for inspection.
- **FOUNDATION INSPECTION:**
 - Upon completion of water proofing, drain tile with stone in place, and prior to backfilling.
- **UNDER SLAB UTILITIES INSPECTION:**
 - After all service equipment, conduit, piping accessories and other ancillary equipment items are in place, but **BEFORE PLACING ANY CONCRETE OR INSTALLING ANY FLOOR SHEATHING, INCLUDING THE SUB FLOOR** schedule a pre-pour and / or pre-sheathing inspection.
 - A minimum of a **ONE HOUR** window is required when scheduling for inspection.
- **CONCRETE SLAB:**
 - Upon completion of insulation, vapor barriers, mesh, re-inforcement, etc. but **BEFORE INSTALLING CONCRETE** schedule a pre-pour inspection.

- **UNDERGROUND ELECTRIC, MECHANICAL, GAS PIPING, Etc. INSPECTION:**
 - After complete underground installations of all electrical conduit, ductwork, hydronic piping, fuel gas piping. **Note: for electrical conduit and gas piping installations it is only necessary to leave three feet of each end of the trench open for inspection; on connections over 100 feet in length the middle portion of the trench will also need to be left open for inspection.**

- **MASONRY FIREPLACE INSPECTION:**
 - To be inspected at the top of smoke chamber when first flue tile is set and smoke chamber purged.

- **ROUGH-IN INSPECTIONS:**
 - All additional permits must be on file (electrical, mechanical, gas piping, etc.)
 - Rough-in inspection compliance approval for framing / structure, electrical, mechanical, gas piping, pre-fabricated fireplaces and any other essential components relevant to the overall construction in any area, is required before concealment.
In addition to the approved construction documents, the following items listed below must be on site for the framing inspection:
 - Roof truss design drawings (depiction of each individual truss), and the truss layout drawing.
 - Manufacturer instructions for:
 - Factory made fire places (prefab)
 - Corrugated stainless steel tubing (CSST)
(Manufacturer's instructions for other equipment or appliances as required)
 - **ELECTRICAL:** Complete electrical rough-in with all splicing in boxes ready to receive devices.
 - **MECHANICAL:** Complete mechanical installations including all ductwork, fuel gas piping equipment and electrical connections. Heat pipes in concrete slab to be inspected prior to pouring concrete.

PLUMBING APPROVALS - In addition to receiving an inspection approval from the Lake County Building Department, IT IS THE CONTRACTOR'S/ OWNER'S RESPONSIBILITY to obtain all PLUMBING APPROVALS from the Lake County Health District, Telephone 440-350-2543. Covering or concealing work without proper inspections and approvals from both the Building and Health Departments is done at your own risk and removal of such covering or

ENERGY EFFICIENCY – INSULATION INSPECTION:

- After all rough inspections and any other work that may be concealed have been inspected for compliance.
 - Insulation is completely installed but prior to placement of any drywall or other covering.
 - Inspections shall include, but not limited to, inspections for envelope insulation R and U value, fenestration U value, duct system R value, and HVAC and water heating equipment efficiency.
- **FIRE RESISTANCE RATED CONSTRUCTION INSPECTIONS:**
 - Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected for compliance.
 - After all wallboard is installed and before wallboard joints and fasteners are taped and finished.

- **ELECTRICAL SERVICE INSPECTION:** (Temporary or Permanent)
 - **Temporary Power Pole** – prior to utility company hook up.
 - **Permanent Electrical Service** – When main panel is installed and grounding is complete with cover off prior to utility company hook up.
 - **Service Underground** – When wire / feeder, direct burial warning ribbon and conduit (if required) has been installed. **Note: it is only necessary to leave three feet of each end of the trench open for inspection; on runs over 100 feet in length the middle portion of the trench will also need to be left open for inspection.**
 - **Approval** is faxed the next business day to the utility company. The electrical contractor/owner is responsible for scheduling hook up with the appropriate utility company.

- **DEMOLITION INSPECTION:**
 - **Final inspection** – A final inspection is required after all demolition debris, driveway (if applicable) and any other materials from the structure have been removed and all areas disturbed by the demolition are reseeded and prepared for new grass growth.
 -

- **FINAL INSPECTION:**
 - A final inspection and approval is required upon completion and approval of all phases of any construction **prior to occupancy**. Note: On the final inspection, the covers of all electrical panels must be removed.
 - **Fuel Piping** – All fuel piping installations must have a fuel piping pressure acceptance test certificate submitted to and approved to the Lake County Building Department before a final inspection can be scheduled. See required Acceptance Test Information under #10 below.
 - **Energy Efficiency** - All required energy efficiency verification and test reports (visual inspection, duct leakage test, blower door test, etc.) must be submitted and approved by the Lake County Building Department before a final inspection can be scheduled.
 - **Final Grading** – Contact your local jurisdiction's engineer to request a final grading inspection/approval. If in a township, contact the Lake County Engineer's office (550 Blackbrook Rd, Painesville Twp. 440-350-2770); otherwise contact your local city or village engineer.
 - **Special Inspections** – All Special Inspection Reports (OB Section 1704) must be submitted and approved to the Lake County Building Department before a final inspection can be scheduled.

PLUMBING APPROVALS - In addition to receiving an inspection approval from the Lake County Building Department, IT IS THE CONTRACTOR'S/ OWNER'S RESPONSIBILITY to obtain all PLUMBING APPROVALS from the Lake County Health District, Telephone 440-350-2543. Covering or concealing work without proper inspections and approvals from both the Building and Health Departments is done at your own risk and removal of such covering or concealing may be required.

• **REQUIRED ACCEPTANCE TESTS:**

- **Fuel Piping Installations** – Prior to acceptance and initial operation, fuel piping shall be inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code.
- All fuel piping Installations must have a **Fuel Piping Pressure Acceptance Test Certificate** submitted to and approved by the Lake County Building Department before a final inspection can be scheduled. (OBC 109.9, RCO 108.2.9)
- For residential projects: **Building Envelope Tightness Test Verification Form** (Blower Door) and/or the **Third Party Visual Inspection Form** and the **Duct Tightness Test Verification Form** when required.
- Automatic Sprinkler System- After scheduling tests with the local fire department notify the Lake County Building Department of the date and time of the test and provide Sprinkler Acceptance Test Certificate as required by OBC 901.5 and NFPA 13.
- **Fire Alarm Systems** – Upon completion of the installation of the alarm notification appliances and circuits, alarm-initiating devices and circuits, supervisory-signal initiating devices and circuits, signaling line circuits, and primary and secondary power supplies shall be tested in accordance with NFPA 72.
 - After scheduling tests with the local fire department, notify the Lake County Building Department of the date and time of the test.
 - Provide Acceptance Test Certificate as required by OBC 901.5.
- **Automatic Fire-Extinguishing System** – including commercial hood and duct systems, commercial cooking systems, foam systems, Halon systems, clean agent systems, carbon dioxide

CONFIRMATION OF APPROVALS REQUIRED TO ISSUE A CERTIFICATE OF OCCUPANCY

- **Final inspection** by Lake County Building Department
- **Plumbing Certificate of Use** issued by the Lake County Health District. Phone 440-350-2543
- **Final Grade/Drainage Inspection Form** from the Lake County Engineers' office or the jurisdiction city/village engineer final grade/drainage inspection form.

• **ADDITIONAL, PARTIAL, AFTER/BEFORE HOURS OR WEEKEND INSPECTIONS**

(Based on inspector availability)

- In the event an additional, partial, after hour or weekend inspection is needed to keep the project moving it can be provided for an additional fee.
- Fees are as follows
 - Additional or partial inspection during regular business hours = \$50
 - Example – partial footer & partial rough inspections.
 - Additional, partial, after / before hour weekday inspection. (7:00 am – 8:00 am, 4:30 pm – 5:30 pm) = \$75
 - Additional, partial weekend and before 7:00 am or after 5:30 inspection = \$225 for up to 3 hours and \$75 per hour thereafter.
 - Fees to be paid for prior to inspections

CERTIFICATE OF OCCUPANCY COPIES

Contractors/Owner(s) may contact the Lake County Building Department one week after a final inspection has been approved AND all confirmations (final grade and plumbing certificate of use) are received by the Lake County Building Department to request a copy of the certificate of occupancy.



LAKE COUNTY BUILDING DEPARTMENT
 27 Woodland Road, Painesville OH 44077
 TEL: 440-350-2636 440-918-2636 800-899-LAKE Ext. 2636
 FAX: 440-350-2660

RESIDENTIAL FEE SCHEDULE

A Review Fee is due at time of initial application.

The Building Department will not collect for subsequent revisions after permit is issued.

- Fee schedule as follows
 - Residential review fee.
 - New Dwelling \$100 (Includes up to one (1) hour of review time, additional review time will be charged at the normal rate)
 - Additions & Alterations \$50 (Includes up to one half (0.5) hour of review time, additional review time will be charged at the normal rate)
 - All others \$25 (Includes up to one quarter (0.25) hour of review time, additional review time will be charged at the normal rate)
 - Commercial / NON- Residential
 - New Building / Structure \$500 (Includes up to five (5) hours of review time, additional review time will be charged at the normal rate)
 - Additions / Alterations \$100 (Includes up to one and one (1) hour of review time, additional review time will be charged at the normal rate)
 - All others \$50 (Includes up to one half (0.5) hour of review time, additional review time will be charged at the normal rate)
- Fee is nonrefundable (after one year of approval date if permit has not been picked up and any additional fees paid the file will be closed)
- Failure to obtain approval / permit fee = Twice the cost of the approval / permit

MISCELLANEOUS FEES

Copies	8 x 11 BW copy \$0.08 each 8 x 14 BW copy \$0.12 each 11 x 17 BW copy \$0.15 each Large copies (larger than 11 x 17) BW \$4.00 each
Additional or partial inspection during regular business hours (Must be paid prior to scheduling inspection)	\$50
Additional, partial, after / before hour weekday inspection. (7:00 am – 8:00 am, 4:30 pm – 5:30 pm) (Must be paid prior to scheduling inspection)	\$75
Additional, partial weekend and before 7:00 am or after 5:30 inspection (Must be paid prior to scheduling inspection)	\$225 for up to 3 hours and \$75 per hour thereafter



Lake County, Ohio

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RESIDENTIAL BUILDING PERMIT FEES

Basic Permit Fee – New Dwellings	\$135 + .05 per sq ft
Additions / Alterations / Detached Garages / Accessory Buildings	\$60 + .05 per sq ft
Decks	\$60
Foundations Only (Manufactured Homes) includes Basic Permit Fee for New Dwellings	\$190
Finished Basements	\$60 + .05 per sq ft
Retaining Wall	\$55
Demolitions	\$70
Fireplace, Wood Stove, Chimney, Chimney Liners (existing structure)	\$55
Hot Tubs/ Swimming Pools (over 24" deep) No electrical	\$50
Hot Tubs/ Swimming Pools (over 24" deep) with electrical	\$75
Consultation	\$50
Request for Permit Extension	\$50
Additional fee if Stop Work Order Posted (fee must be paid prior to scheduling final inspection).	\$135
Reinspection Fee - A reinspection shall be required when the inspector must return to work that was not ready,	\$55
Residential Appeals Hearing	\$350



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RESIDENTIAL ELECTRICAL PERMIT FEES

Basic Permit Fee (Required unless otherwise noted)	\$60
New Dwellings (One, Two or Three-Family) and Additions	.035 per sq ft
New Service / Change / Upgrade (If over 200 Amps requires Electrical Diagram and Plan Review Fee)	\$40
Temporary Power Pole (Separate Permit required w/Basic Fee)	\$40
Subfeed after Main Disconnect	\$40
Duplex Outlets, Receptacles, Switches, Fixtures	\$0.60
Power Outlets (Ranges, Dryers, Motors)	\$6
Electric Heat: (Baseboard)	\$10
Heat Pump	\$45
Generators (requires Electrical and Gas Piping Diagrams and Separate Permit w/Basic Fee & Plan Review Fee)	\$50
Transformers: Step up / down (not under Power Co. control)	\$17
Electric to Septic System (Separate Permit required w/Basic Fee)	\$40
Plan Review Fee	\$100 per hour
Reinspection Fee - A reinspection shall be required when the inspector must return to work that was not ready, approved prints not on job site, building was locked, and / or had failed a previous inspection. Fee must be paid prior to scheduling final inspection, or if two (2) fees are assessed on a project, fees are due before the next inspection is scheduled.	\$55



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RESIDENTIAL MECHANICAL PERMIT FEES

Basic Permit Fee (Required)	\$60
New Dwellings (One, Two or Three-Family) and Additions	.035 per square ft
Heating / Air Conditioning – each system	\$40
Heat Duct Extensions – each system	\$30
Unit Equipment – each system	\$30
Fuel Gas Piping - each gas outlet (Separate Permit required with Basic Fee)	\$5
Hydronic / Hot Water or Steam each system (Separate Permit required with Basic Fee)	\$30
Hydronic / Hot Water or Steam Extensions - each system (Separate Permit required with Basic Fee)	\$30
Plan Review Fee	\$100 per hour
Reinspection Fee - A reinspection shall be required when the inspector must return to work that was not ready, approved prints not on job site, building was locked, and / or had failed a previous inspection. Fee must be paid prior to scheduling final inspection, or if two (2) fees are assessed on a project, fees are due before the next inspection is scheduled.	\$55