

**HURON TOWNSHIP
RESIDENTIAL CONSTRUCTION
PROCEDURES**

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**HURON TOWNSHIP
BUILDING DEPARTMENT
RESIDENTIAL**

The following is the procedure being used when applying for a building permit for a residential project within the Huron Township Building Department jurisdiction. (Huron Twp., Bay View Village, Berlin Village, Castalia Village, City of Huron, Groton Twp., Milan Village, Margaretta Twp., Oxford Twp.) This procedure outlines your responsibility and the Building Department's timetable for the issuance of your permit.

The procedure is as follows:

1. The applicant shall secure the building/electrical permit application at the Building Department Office, 1820 Bogart Road, Huron, Ohio, tboos@hurontwp.org, www.hurontwp.org, or call (419) 433-2755. The permit application shall be returned to the office either personally or by mail. You are required to apply for your plumbing permit from the Erie County Health Department, Sandusky, Ohio.
2. All applicable questions on the permit must be answered fully and all required information must be submitted. If you find a question that is confusing or you don't know how to answer, please contact the Building Dept. office for assistance.
3. Your permit application will be reviewed by the Department within FIVE (5) work days from our receipt of the completed application. If there are questions, a problem is found with your application, or all the required information is not submitted as required, you will be contacted within this FIVE (5) day review period.
4. **After your permit is issued, there are several "benchmarks" or important inspections required by the Department.** These can be found on the "Required Inspections" section of this application packet. It is ultimately the owner's responsibility to assure that these inspections are performed.
5. If your project is within Huron Township, pay particular attention to the section of the application that asks about the driveway or street opening. Before any work is done in the right-of-way, you are required to secure a "street opening" permit from the applicable jurisdiction. Also, you are responsible for your mailbox. It must be installed using a "breakaway" design.
6. If, at any time during this procedure, you have a question or a problem arises, do not hesitate to contact this office at the above phone numbers.
7. This application requires TWO (2) complete sets of plans. **These are listed in the 2019 Ohio Residential Code, Section 106.** This includes but not limited to; index, all fire ratings, site plan, Flood Plan information (if located in a flood zone), any accessibility plan, floor plans (showing door swing, basements, crawl space, ramps, windows, shafts, room size), Exterior wall envelope, completed cross-sections, structure details, j-loads, plumbing, electrical and mechanical layout

HURON TOWNSHIP BUILDING DEPARTMENT REQUIRED INSPECTIONS

The following inspections are required by the Building Department. It is ultimately the owner's responsibility to notify the Department when the work is ready for inspection, this notification can come from the contractor. The phone number of the Building Department is (419) 433-2755 and it is open from 7:00 AM – 3:00 PM Monday thru Thursday, 6 to 2 on Fridays. When you contact the Department for an inspection, we have four days to inspect the work.

The inspections are as follows: Section 108 of the 2019 O.R.C.

1. Footers after the excavation is prepared and the footers are formed but before they are poured. For this inspection all permanent lot line markers are required
2. Foundations the foundation wall is being constructed all required reinforcing steel is in place.
3. Concrete Slab and Under-floor inspection - After in-slab and under-floor reinforcing steel and building service equipment is in place.
4. Framing/HVAC - Before insulation/drywall while the walls are open and after electrical and plumbing has been approved.
5. Lowest Floor Elevation - Elevation certification required in Section 322 shall be submitted
6. Fire-resistant penetrations - Protection of joint and penetrations in fire-resistant-rated assemblies shall not be concealed from view until inspected and approved
7. Energy efficiency inspections - Compliance with Chapter 11 - Such as but not limited to, R-values and U-values, Duct system R value, caulking/sealing of opening, and water heater equipment efficiency.
8. Testing of building service equipment - Inspection of all building service equipment to ensure that it has been installed. Includes but not limited to, mechanical heating and ventilating systems, mechanical exhaust systems, fire protection systems, and electrical systems, including Blower Door and Ductwork Blast Tests.
9. Other inspections any other inspections required by the Building Official to assure compliance.
10. Compliance / Final Occupancy - before the residence is occupied and after all aspects of the project are complete, including but not limited to; all plumbing and electrical is completed, all smoke detectors are in place and operable, and sump pumps and other storm drainage is properly discharged. (Storm water must not be disposed of in the sanitary sewer system). Blower door test submitted to the Bldg department.

In addition, electrical inspections including but not limited to temporary, underground, bonding, rough-in service and final inspections. **Calling an inspector without a permit will cause a 200% penalty to be enacted, & working without a permit will cause a 200% penalty to be enacted.**

Electrical Inspectors: Greg Capucini 419-656-3108
Steve Ritzenthaler 419 357-1006

**HURON TOWNSHIP
BUILDING PERMIT APPLICATION**

Jurisdiction: Huron Twp. Huron City Milan Village Berlin Village Margaretta Twp.
Oxford Twp. Castalia Village Bay View Groton Twp.

Property Owner:

Name: _____ E-mail: _____
Address: _____
Telephone Number: (____) _____

Contractor:

Name: _____ E-mail: _____
Address: _____
Telephone Number: (____) _____

Location of Project

Street Address: _____
Lot #: _____
Parcel #: _____

DESCRIPTION:

Addition/Remodeling Renovation Other

Building Use: Residence Single Family Two Family Three Family

Detached Accessory Building Other: _____

Area of Project: _____ sq. ft. (round up to the next 100 sq. ft.)

ZONING

If the project is in any jurisdiction, (other than Huron Township), an approved zoning certificate must accompany this application.

Has the zoning certificate been issued by the appropriate jurisdiction and is it attached to this application? YES NO

Huron Township's project only fill in setback questions below:

Setbacks: (Required for all new structures and additions)
Front Yard: _____ ft. (for new structures only)
Front yards of adjoining structures: right _____ ft. left _____ ft.
Side Yards: right _____ ft. left _____ ft.
Rear Yard: _____ ft.

(All of the above measurements shall be from the property line)

Overall height of the proposed structure: _____ ft from final grade

Flood Zone of the Subject Property: A X

Must comply with Section 106.2.1 of the 2019 Ohio Residential Code

What permits are being applied for:

Structural Electrical Temporary Electric

Value of the Work being Done:(excluding the lot) \$ _____

***For all jurisdictions, two (2) complete sets of plans, including but not limited to, electrical and mechanical, Energy Code Compliance, J-load, specs for a new furnace, AC, and fireplace, and a site plan.**

CONSTRUCTION DETAILS:

FOOTERS

Size of Footers: _____" x _____" Depth of footers below final grade: _____"
Reinforcing bars: yes no

FOUNDATION WALL

Block size of block _____"
Reinforcing #4 #5 #6 bars _____" o/c
No Reinforcing Explain: _____

Wall Height _____ inches

Poured Concrete thickness of wall: _____"
Reinforcing Bars #4 #5 #6
every _____"
No Reinforcing Explain: _____

Anchor Bolts: (required 6" on center and within 12" of corners)

Does anchor bolt installation meets or exceed Code: yes no

Depth of unbalanced fill* against the foundation wall: _____ inches/feet
*(difference of the height of the interior floor and exterior grade)

GENERAL FRAMING

Are all the floor supports (beams and columns) properly secured to avoid displacement? Yes No

Floor System:

1st Floor

Joist Dimension: _____" x _____" _____" on center Longest clear span of joist: _____ feet
Joist Hangers yes no (if no, explain how the joist is secured: _____
Deck Material: _____

2ND Floor:

Joist Dimension: _____" x _____" _____" on center Longest clear span of joist: _____ feet
Joist Hangers yes no (if no, explain how the joist is secured: _____
Deck Material: _____

Walls:

Framing Lumber Dimension _____" x _____" _____" on center
Exterior Sheathing: _____

Truss/Rafters:

Dimension: _____" x _____" _____" on center
Site built Pre-Built (Requires Manufacturers Spec sheet)
Truss Ties Required

Roof:

Deck Material: _____
Ice Guard Required
Shingles: _____

All LVL, Pre-Built Truss require manufacturer specs

If any changes or renovation is to be done to the electrical system, the following must be completed:

ELECTRICAL (Current NEC Edition)

Entrance Panel Size _____ amp.
Service Overhead Underground
***All receptacles are required to be tamper resistant**
***All outside receptacles are required to be weather resistant**
***Ground fault interrupters required in all "wet" locations**

If any changes or renovation is to be done to the HVAC system, the following must be completed:

HVAC

Fuel Type:
Natural Gas Electric LPG Other _____
Heating/Air Conditioning:
Forced Air Furnace Radiant Baseboard Heat Pump Boiler Central Air
Seer Rating 11 12 13 14 15 16 Furnace Rating _____%
Duct Size: _____

Complete applicable sections of the following Life-Safety section:

LIFE SAFETY & STORM DRAINAGE CONNECTIONS:

- 1. Are "hardwired" smoke detectors installed in each sleeping room, in the immediate vicinity of each sleeping area and on each floor including the basement.
yes no

- 2. Does at least one window in each sleeping area meet the following minimums:
 - a. sill height less than 44" from the floor
 - b. at least 5.7 square feet of openable area on the 2nd floor and at least 5.0 square feet of openable area on the 1st floor.
 - c. Minimum clear dimensions of:
Minimum opening width 22"
Minimum opening height 24"
Operable from the inside of the room without keys or tools: yes no

- 3. Will all enclosed accessible areas under stairways be covered with at least one (1) layer of 1/2" drywall?
yes no

- 4. If there is an attached garage, is it completely separated from the residence with at least one (1) layer of 1/2" drywall and are all communicating doors rated for at least 1/2 hour? yes no

- 5. Is there a driveway opening, mailbox, or any other type of opening planned for the right-of-way area.
yes no **--CUTTING OF THE CURB IS ONLY PERMITTED WITH THE PROPER PERMIT FROM APPLICABLE JURISDICTION**

- 6. Any connection to the Huron Township storm sewer system can only be done with prior approval of the Huron Township Road Department

Completely explain each "no" answer in the LIFE SAFETY section.

- 7. Detail the energy code requirements of Chapter 11 for this project to prove compliance.
-
-

Contractor Registration:

Each contractor/sub-contractor doing work in Huron Township, the Village of Milan, or Milan Township is required to be registered with Huron Township under their specific trade or as a General Contractor

Please give a complete list of all Sub-Contractors for this project:

Structural: _____
Name Address Phone

Footer/Foundation: _____
Name Address Phone

Electrical: _____
Name Address Phone

HVAC: _____
Name Address Phone

Interior Finishes: _____
Name Address Phone

Residential Energy Efficiency Compliance Declaration Form

Jobsite Address: _____

Street Address & City/Township

2019 Residential Code of Ohio (RCO) 1101.2

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

1. Sections 1101.14 through 1104 of Chapter 11 of the 2019 RCO, or
2. Section 1105 (the Simulated Performance approach) and provisions of Sections 1101.14 through 1104 indicated as "Mandatory", or
3. Section 1106 (the Energy Rating Index (ERI) approach) and the provisions of Sections 1101.14 through 1104 indicated as "Mandatory," and Section 1103.5.3, or
4. Section 1112 ("The Ohio Home Builder's Association (OHBA) Alternative Energy Code Option"), or
5. The "International Energy Conservation Code"

Applicant shall indicate the energy compliance option below:

Check one option below:

1. 2019 RCO Sections 1101.14 through 1104, Prescriptive Method*

Then check on of the following:

- Prescriptive method based on R-value, 2019 RCO Table 1102.1.2
 Prescriptive method based on U-factor alternative, 2019 RCO Table 1102.1.4
 Prescriptive method based on Total UA alternative, 2019 RCO 1102.1.5

2. 2019 RCO Section 1105 Simulated Performance Approach*

3. 2019 RCO Section 1106 Energy Rating Index (ERI) Approach*

***Note:**

2019 RCO 1102.4.1.2:

2019 RCO 1103.3.3(1) or (2):

Air leakage testing in accordance with RESNET/ICC 380, ASTM E779, or ASTM E1827 & written report required.

Duct air leakage testing & written report required (*not required if air handler and all ducts are located within conditioned space*).

4. 2019 RCO Section 1112 "The Home Builder's Association (OHBA) Alternative Energy Code Option"***

Then check on of the following:

- Compliance Path #1
 Compliance Path #2

****Note:**

2019 RCO 1112.2.4.2.1:

2019 RCO 1103.2.2(1) or (2):

Air-leakage testing (blower door) & written report required.

Duct air-leakage testing & written report required (*not required if air handler and all ducts are located within conditioned space*).

5. 2018 International Energy Conservation Code (IECC)

6. Compliance Alternatives for Existing Buildings, RCO Sections 1107 thru Section 1111 (*Additions, Alterations, Repairs and Change of Occupancy or Use*)

Signature _____

Date _____

Supplemental Energy Information

2019 RCO Sections 1101.14 through 1104, Prescriptive Method (Design Table(s))

Table 1102.1.2
Insulation and Fenestration Requirements by Component

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
5 and Marine 4	0.30	0.55	NR	49	20 or 13 + 5	13/17	30	10/13	10, 2 ft	10/13

Table 1102.1.4
Equivalent U-Factors

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
5 and Marine 4	0.30	0.55	0.026	20 or 13 + 5	13/17	30	10/13	10/13

2019 RCO Sections 1107.4.1, Compliance Alternative for Existing Buildings, Prescriptive Method (Design Table)

Table 1107.4.1
Insulation and Fenestration Requirement by Component

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
5 and Marine 4	0.30	0.55	NR	49	20 or 13 + 5	13/17	30	10/13	10, 2 ft	10/13

2019 RCO Section 1112 "The Home Builder's Association (OHBA) Alternative Energy Code Option" (Design Table(s))

Table 1112.2.1
Insulation and Fenestration Requirements by Component

	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
Compliance Path #1	0.32	0.60	NR	49	15 or 13 + 3	13/17	30	10/13 (minimum 4 ft)	10, 2 ft	10/13
Compliance Path #2	0.32	0.60	NR	49	13	13/17	30	10/13 (minimum 4 ft)	10, 2 ft	10/13

Table 1102.1.4
Equivalent U-Factors

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
Compliance Path #1	0.32	0.60	0.026	0.077	0.082	0.033	0.059 (minimum 4 ft)	0.065
Compliance Path #2	0.32	0.60	0.026	0.082	0.082	0.033	0.059 (minimum 4 ft)	0.065

2019 RCO Sections 1101.14 through 1104, Mandatory Requirements

1101.14 Certificate (Mandatory). A permanent certificate shall be completed by the owner or the owner's representative and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electric panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall indicate the predominant R-values of insulation installed in or on ceilings, roofs, walls, foundation components such as slabs, basement walls, crawl spaces walls and floors, and ducts outside conditioned spaces; U-factors or fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leaking testing performed on the building. Where there is more than one value for each component, the certificate shall indicate the value covering the largest area. The certificate shall indicate the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall indicate "gas fired unvented room heater", "electric furnace" or "baseboard electric heater", as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces and electric baseboard heaters.

1102.4 Air leakage (Mandatory). The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections 1102.4.1 through 1102.4.5.

1102.4.1 Building thermal envelope. The building thermal envelope shall comply with Sections 1102.4.1.1 and 1102.4.1.2. The sealing method between dissimilar materials shall allow for differential expansion and contraction.

1102.4.1.1 Installation. The components of building thermal envelope as indicated in Table 1102.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria indicated in Table 1102.4.1.1, as applicable to the method of construction.

1102.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not more than five air changes per hour. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported as pressure of 0.2 inch w.g. (50 Pascals). A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creating of all penetrations of the building thermal envelope.

During Testing:

1. Exterior windows and doors, fireplace, and stove doors shall be closed but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, where installed at the time of test, shall be open.
4. Exterior or interior terminations for continuous ventilation systems shall be sealed.
5. Heating and cooling systems, where installed at the time of the test, shall be turned off.
6. Supply and return registers, where installed at the time of the test, shall be fully open.

Exception: Existing buildings complying with Section 1107.

1102.4.2 Fireplaces. New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where tight-fitting doors on factory build fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace.

1102.4.3 Fenestration air leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of not greater than 0.3 cfm per square foot, and floor swinging doors not greater than 0.5 cfm per square foot, when tested in accordance with NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an approved agency and listed and labeled by the manufacturer.

1102.4.4 Rooms containing fuel-burning appliances. In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room that is isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table 1102.1.2, where the walls, floors and ceilings shall meet a minimum of the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with 1103. The combustion air duct shall be insulated where it passes through conditioned space to an R-value of not less than R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with 1102.4.2 and 1006.

1102.4.5 Recessed lighting. Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. Recessed luminaires shall be IC-rated and labeled as having an air leakage rate of not greater than 2.0 cfm when tested in accordance with ASTM E283 at a pressure differential of 1.57 psf. Recessed luminaires shall be sealed with a gasket or caulked between the housing and the interior wall or ceiling covering.

1102.5 Maximum fenestration U-factor and SHGC (Mandatory). The area-weighted average maximum fenestration U-factor permitted using tradeoffs from Section 112.1.5 or 1105 shall be 0.48 in Climate Zones 4 and 5 for vertical fenestration, and 0.75 in Climate Zones 4 through 8 for skylights.

1103.1 Controls (Mandatory). Not less than one programmable thermostat shall be provided for each separate heating and cooling system.

1103.1.1 Programmable thermostat. The thermostat controlling the primary heating or cooling system of the dwelling unit shall be capable of controlling the heating or cooling system of the dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperature of not less than 55°F to not greater than 85°F. The thermostat shall be programmed initially by the manufacturer with a heating temperature setpoint of not greater than 70°F and a cooling temperature setpoint of not less than 78°F.

1103.1.2 Heat pump supplementary heat. Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

1103.3.2 Sealing (Mandatory). Ducts, air handlers and filter boxes shall be sealed. Joint and seams shall comply with Section 1601.4.1.

1103.3.3 Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. Registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

1. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely inside conditioned space.
2. A duct air-leakage test shall not be required for ducts serving heat or energy recovery ventilators that are not integrated with ducts serving heating or cooling systems.

A written report of the results of the test shall be signed by the party conducting the test and provided to the building official.

1103.3.5 Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts.

1103.4 Mechanical system piping insulation (Mandatory). Mechanical system piping capable of carrying fluids greater than 105°F or less than 55°F shall be insulated to an R-value not less than R-3.

1103.5.1 Heated water circulation and temperature maintenance systems (Mandatory). Heated water circulation systems shall be in accordance with Section 1103.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section 1103.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible.

1103.5.1.1 Circulation systems. Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.

1103.5.1.2 Heat trace systems. Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input of the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy.

1103.6 Mechanical ventilation (Mandatory). The building shall be provided with ventilation that complies with the requirements of Section 1505 or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

1103.7 Equipment sizing and efficiency rating (Mandatory). Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

1103.8 Systems serving multiple dwelling units (Mandatory). Systems serving multiple dwelling units shall comply with Sections 403 and 404 of the *International Energy Conservation Code* – Commercial Provisions instead of Section 1103.

1103.9 Snow melt system controls (Mandatory). Snow and ice-melting systems, supplied through energy services to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is greater than 50°F and precipitation is not falling, and an automatic or manual control that will allow shutoff when the outdoor temperature is greater than 40°F

1104.1 Lighting equipment (Mandatory). Not less than 90 percent of permanently installed lighting fixtures shall contain only high efficiency lamps.

1104.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

Huron Township Building Department

1820 Bogart Rd.

Huron, OH 44839

ENERGY COMPLIANCE STATEMENT GUIDE AND WORKSHEET

Energy compliance documents are a required submittal with all New Homes, Residential Additions, and Major Residential Renovations. Documents may be a single sheet statement (a worksheet is provided on page 2 of this document for your convenience) with: Name, Address, Method chosen and your actual proposed design criteria that shows you meet or exceed requirements.

There are several energy methods from which to choose:

1. U A Alternative – (REScheck) from IECC 402.1.4 or the RCO 1102.1.3 (downloadable program)
2. PERFORMANCE- (REMrate) from IECC Section 405 (downloadable program)
3. ENERGY RATING INDEX - (ERI) from the RCO chapter 1106
4. PRESCRIPTIVE – from the IECC chapter 4 or the RCO Chapter 11 (see worksheet)
5. OHBA option #1 or option #2 – from the RCO Section 1105 (see worksheet)

The following steps will help guide you thru the U A Alternative method.

1. Go to <http://www.energycode.org> and download REScheck program. (This is a free download and very quick)
2. The opening page will display a toolbar. Click on the option CODE. Click on latest version IECC.
3. There are 3 tabs on this page: Project: Envelope: Mechanical
 - a. Project fields are Name, Address, Job Description, etc
 - b. Envelope fields are user friendly. Follow the prompts with the requested information. (Note: gross area equals square footage; cavity refers to the R-Value of the insulation you are installing in the cavity; continued refers to the R-Value (if any) of the panels, sheathing, etc.; the manufacturer supplies U-Values for doors and windows.)
 - c. Mechanical fields are HVAC related.
4. When the fields are completed, click back to the project tab to allow the information to register. Check the bottom of the page to verify that compliance has passed. If

compliance has not passed, adjust R-Values and/or HVAC efficiency to meet compliance.

5. Click on 'file', then choose 'view/print report' to review or print a hard copy. Choose 'Save Report' to save a copy of your Report. Choose 'Email Report' to email your report. Be sure that these 3 checkboxes are marked: **Compliance Certificate, Inspection Check List, and Panel Certificate.**
6. Note that the submitted compliance statement must be true representation of the actual finished project and is subject to inspection.

NOTE:

Some Lumber Supplies, Insulation Contractors, or Mechanical Contractors will supply this compliance statement for their customers.

2019 RESIDENTIAL CODE OHIO ENERGY COMPLIANCE PATH OPTIONS FOR CLIMATE ZONE 5

Compliance shall be demonstrated by meeting the requirements of one of the following (6) options:

Submit a: UA Alternative (RES v) OR Performance (REM Rate) OR Energy Rating Index (ERI) OR use one of the three options below

To use as a submittal form, check box of choice and infill right column

Prescriptive Per RCO 11112 OHBA #1 RCO 11112 OHBA #2

Description	2018 IECC/RCO 1102 new homes and additions		NEW HOMES ONLY		NEW HOMES ONLY	
	U-Factor	Lower U-factor values are better values	U-Factor	Lower U-factor values are better values	U-Factor	Lower U-factor values are better values
Minimum Fenestration U-Factor (all windows)	0.3		0.32		0.32	
Sky/light Fenestration	0.55		0.60		0.60	
Ceiling R Value R-49, or R-38 if Raised Heals at eaves	R-49 or 38 W/ RH		R-49 or 38 W/ RH		R-49 or 38 W/ RH	
Wood Framed cavity walls R Value, continuous is foam sheathing	20 or 13 + 5 continuous		15 or 13 + 3 continuous		13	
Mass Wall R Value (ie. above grade walls of concrete, block, ICF, logs, etc.) R-13 when on exterior.	13 or 17		13 or 17		13 or 17	
Framed Floor R value (ie. above garage, below cantilever)	30		30		30	
Basement Wall R Value, R-10 continuous or R-13 cavity	10 or 13 (full hgt of wall)		10 or 13 (top 4 ft)		10 or 13 (top 4 ft)	
Slab R Value, vertical or horizontal	10 @ 2 ft		10 @ 2 ft		10 @ 2 ft	
Crawl Space wall R Value, top 4' Minimum, R-10 continuous or R-13 cavity	10 or 13		10 or 13		10 or 13	
Blower Door Test is mandatory for all at 5ACH max @50p.	Yes (additions and alterations are exempt)		Yes		Yes	
Ducts must be tested for tightness (IECC 403.22), if not within conditioned space	Yes or NA		Yes or NA		Yes or NA	
Supply ducts in attic shall be sealed and insulated to a minimum of R8 & leak tested	R-8 or NA		R-8 or NA		R-8 or NA	
Mechanical ventilation required-I.E., fresh air to furnace energy recovery exhaust fan(s) <input type="checkbox"/> , or some combination of bath, kitchen exhaust with timer control -state at right	Yes		Yes		Yes	
Access doors from conditioned spaces to unconditioned space shall be weather-stripped	Yes		Yes		Yes	
Circulating hot water systems piping shall be insulated to at least R- per Section 1103.4	R-3 (all)		R-2 first 5 ft		R-2 first 5 ft	
Mechanical system piping (fluids above 105 F or below 55 F) must be insulated to a minimum of	R-3 or NA		R-3 or NA		R-3 or NA	
Minimum percentage of high efficacy lighting fixtures	90%		90%		90%	
Programmable thermostat required	Yes		Yes		Yes	
Permanent certificate shall be posted on the electrical panel	Yes		Yes		Yes	
Furnace Efficiency Rating	Equipment Sizing shall meet Section M1401.0 of the IRC					
Air Conditioner SEER Ratio	SEER					

Project address: _____

Owner or representative: _____

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