

Maine Uniform Building and Energy Code Residential Energy Code Application

for Certification of Compliance for New Construction, Additions and/or Renovations (IECC 2015 Compliance Form)

Minimum Provisions Effective Date: July 1, 2021

Owner: Company Name: (if applicable)			General Contractor: Company Name:		
Name:			Name:		
Mail Address:			Mail Address:		
Town/City:	State:	Zip:	Town/City:	State:	Zip:
Phone:	Cell:	•	Phone:	Cell:	
E-Mail:			E-Mail:		
Location of Proposed Structure: Tax Map #: Street Address:			Type of Construction: O Residential O New Building O Renovation O Addition O Thermally Isolated Sunroom O Modular Home: the site contractor must submit this		
Town/City:	County:		form detailing supplementary rooms and Floor and/or Basement insulation unless the floor insulation is installed or provided by the manufacturer and no heated space is added.		
Total New Conditioned* Floor Area: ft² (*a conditioned space is one being heated or cooled, containing uninsulated ducts or with a fixed opening into a conditioned space. Heating System: (if new system is being installed) Annual Fuel Use Efficiency (AFUE): % Fuel Type(s): ☐ Oil ☐ Natural Gas ☐ Propane (LP) ☐ Electric ☐ Wood ☐ Other			Basement or Crawl Space: Conditioned? ○ Yes (Walls must be insulated) ○ No □ Full Basement □ Walk Out Basement □ Slab on Grade □ Other □ Structure is EXEMPT because: □ Mobile Home □ On an historic register □ Low energy use (less than 1 watt/ ft²)		
Heating System Type: ☐ Hot Water ☐ Hot Air ☐ Stove ☐ Resistance ☐ Heat Pump ☐ Geothermal			☐ Log, post and beam, or timber framed structure.		
Form Submitted by: ☐ Owner ☐ Builder ☐ Designer ☐ Other Architects must certify plans meet code					
Updated: January 18, 2022 I hereby certify that all the information contained in this application is true and correct, and construction shall comply in all respects with the terms and specifications of the approval given by the Planning and Permitting Department for the City of Auburn, and meet the requirements of the Maine Uniform Building and Energy Conservation Code.					
rnature Print Name				<mark>Da</mark>	ate
Official Use Only Date Complete Application Received: Approved by: Date:					
Building Permit Number:			Circle one:	zuw.	
		Prescriptive / Performance			

MUBEC Residential Energy Code

Building Permit No.:

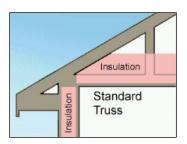
Code effective: July 1, 2021 Directions: Complete the "Your Proposed Structure" columns. No measurements or calculations are needed. If you at least meet the Maine Uniform Building and Energy Code requirements, your project will be approved. Write N/A in any section that does not apply to your project. Submit pages 1 and 2 only. If your planned structure cannot meet these requirements, consider downloading REScheck

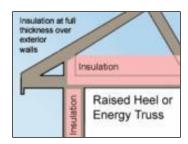
from http://www.energycodes.gov/rescheck/download.stm and use trade-offs to prove compliance. The completed REScheck report must be attached to this form.

You are encouraged to	build with higher R-values	and lower U-values than you	1 1	t here. The "Required R or U Values" are the minimum standards in ME. YOUR PROPOSED STRUCTURE		
Building Section	Required R	or U Values	Write Planned R and U Values	Brands / Models / insulation type and thickness (if known)		
Window U	U .32 (maximum)		Write in U-Value	Window Type: O Low-e O Low-e Argon		
(lower U is better)	Factor (lower U is better) U .45(Thermally Isolated Sunrooms only)			☐ Check if Sunroom		
Skylights	U .55		Write in U-Value	☐ Check if Sunroom		
Flat Ceiling ⁱ	U .70 (Thermally Isolated Sunrooms only)		Write in R-Value	NOTE: R-38 will be deemed to satisfy the requirement for R-49 if the full R-38 insulation value is maintained over the outside plates. If using only R-38 (Zone 6) ,		
or	Standard Truss	Raised Heel or Energy Truss		you must certify that you'll maintain R-38 over the plates by checking the box below.		
Flat Ceiling with Raised or	<u> </u>	E CONTRACTOR CONTRACTOR		By checking this box, I certify that this		
Energy Trusses R-value	R-49 (Zone 6) if using the above construction technique	R-38 (Zone 6) if maintaining the full R value over the plates	→ If using only R-38 in Zone 6 you must check	structure is being built with a raised energy truss or that the full R-value of the ceiling insulation will be maintained over the outside plates.		
Sloped or Cathedral R-38 or 30 if less than 500 ft sq or 20% of total insulated ceiling area,		write in R-Value				
Ceiling	R-24 (Thermally Isolated Sunrooms only)			☐ Check if Sunroom		
Above Grade Wall ⁱⁱ R-value	R-20+5 <i>OR</i> R-13+10 The first value is cavity insulation, the second value is continuous insulation		Write in R-Value			
	R-13 (Thermally Isolated Sunrooms only) R-15(outside) or R-20(inside) MassWalls			☐ Check if Sunroom ☐ Check if Mass Wall		
Door U-Value	U .32 (maximum)		Write in U-Value			
Floor R Value (Basement ceiling)	R-30 or Insulation sufficient to fill joist cavity		Write in R-Value	Y 0 1 111 1 1		
Basement or Crawl Space	R-15 Cavity Insulation or R-19 Continuous Insulation for crawl space wall		Write in R-Value	If conditioning the basement you must insulate Basement Walls . If not, you may insulate either Floor or Basement Walls and/or Slab Edge		
Wall R Value	R-19 Cavity Insulation or R-15 Continuous Insulation for <u>basement</u> wall		Write in R-Value			
Slab Edge ⁱⁱⁱ R Value	R-10 / 4' (Zone 6) (see drawing pg 3)		Write in R-Value	☐ Check if Slab is heated		
r value	add R-5 if the Slab is heated					
Air Sealing	Planned Air Sealing Test Method By signing this form, I certify that I understand that I must submit a signed written report indicating compliance.		Blower Door	The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding three air changes per hour. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals).		

Residential Energy Code Application for Certification of Compliance Footnotes

ⁱ <u>Ceilings with attic spaces</u>: R-38 in Zone 6 will be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves or the full R-value is maintained. This is accomplished by using a raised heel or energy truss as shown in the diagram below or by using higher R-value insulation over the plates.

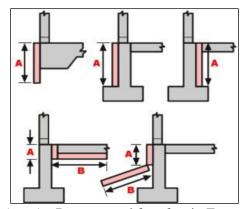




- ii R-13 + R-5 means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where the structural sheathing is placed. If structural sheathing covers more than 25 percent of exterior, the structural sheathing must be supplemented with insulated sheathing of at least R-2.
- iii Slab edge insulation must start at the top of the slab edge and extend a total of four feet (Zone 6). Insulation may go straight down, out at an angle away from the building, or along the slab edge and then under the slab. A slab is a concrete floor within 1' of grade level. See diagram below.

The top edge of insulation installed between the exterior wall and the interior slab may be mitered at a 45 degree angle away from the exterior wall.

Allowable Slab Insulation Configurations



A or A+ B must equal four feet in Zone 6

MODULAR HOMES must be certified by the Maine Manufactured Housing Board. Unless the floor insulation is provided by the manufacturer this form must be submitted. This form must also be submitted if the basement is to be insulated or supplementary heated space is added to the home upon or after it is set.

MUBEC ENERGY CODE

Summary of Basic Requirements

See IECC 2015 Code Book for complete details

The following 2 pages must be provided to the building inspector at final inspection or retained.

<mark>√</mark> Check here		Building Permit Number:
	Air Leakage Code section 402.5 The building thermal envelope must be durably sealed to limit infiltration	All joints, seams, penetrations and openings in the thermal envelope including those around window and door assemblies, utility penetrations, dropped ceilings or chases, knee walls, behind tubs and showers, separating unheated garages from the thermal envelope, common walls between dwelling units, attic access, rim joist junction and all other openings in the building envelope that are sources of air leakage must be caulked, gasketed, weather-stripped or otherwise sealed.
	Air Sealing and Insulation Code Section 402.4.1.1	Building envelope air tightness and insulation installation shall be demonstrated to comply with requirements by Blower Door testing to less than 3 air changes/hr at 50 Pa.
	Testing Requirement Code Section 402.4.1.2	Blower Door Test conducted by: Result (at 50 Pa): CFM Interior Volume CFACH A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building
	Fireplaces	thermal envelope. New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air.
	Code Section 402.4.2	
	Recessed Lighting Code Section 402.4.5	Recessed lights must be type IC rated and labeled as meeting ASTM E 283 and sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.
	Electrical Power and Lighting Systems Code section 404	Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.
	High-Efficacy Lamps Code section 202	Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of: 1. 60 lumens per watt for lamps over 40 watts, 2. 50 lumens per watt for lamps over 15 watts to 40 watts, and 3. 40 lumens per watt for lamps 15 watts or less.
	Materials and Insulation Information Code section 102.1	Materials and equipment must be identified so that code compliance can be determined. Manufacturer manuals for all installed heating, cooling and service water heating equipment must be provided. Insulation R-values, glazing and door U-values and heating and cooling equipment efficiency must be clearly marked on the building plans, drawings or specifications.

MAINE BUILDING AND ENERGY CONSERVATION CODE Summary of Basic Requirements

Attic I	own Attic Stairs, Hatch, and Knee Wall Doors section 402.2.4	Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces.
	l size Attic or ent Entry Doors	All doors leading from a conditioned space into an unconditioned attic or enclosed attic or basement stairwell should be insulated and weather-stripped exterior rated door units. One door is exempt.
	e section 403.3.1	Supply and return ducts in attics shall be insulated to a minimum of R-8 where 3 inches (76 mm) in diameter and greater and R-6 where less than 3 inches (76 mm) in diameter. Supply and return ducts in other portions of the building shall be insulated to a minimum of R-6 where 3 inches (76 mm) in diameter or greater and R-4.2 where less than 3 inches (76 mm) in diameter.
	Ouct Sealing e sections 403.3.2	Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with either the International Mechanical Code or International Residential Code, as applicable
	Ouct Testing ctions 403.3.3	Duct tightness shall be verified by testing unless the air handler and all ducts are located within the conditioned space. Test conducted by:
		Duct test result at 25 Pa:Post construction orRough-in test
	erature Controls ection 403.1 & .1.1	At least one thermostat must be provided for each separate heating and cooling system. Hot air systems must be equipped with a programmable thermostat.
		Heat pumps having supplementary electric-resistance heat must have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load
	ical System Piping Insulation e section 403.4	Mechanical system piping capable of conveying fluids at temperatures above 105°F or below 55°F must be insulated to R-3.
	ating Hot Water Systems e section 403.5	Circulating service water systems must include an automatic or readily accessible manual switch that can turn off the hot water circulating pump when the system is not in use.
		Circulating domestic hot water system piping shall be insulated to R-4.
	nical Ventilation e section 403.6	Outdoor air intakes and exhausts must have automatic or gravity dampers that close when the ventilation system is not operating.
	ipment Sizing e section 403.7	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.
	Certificate e section 401.3	A permanent certificate, completed by the builder or registered design professional, must be posted on or in the electrical distribution panel. It must list the R-values of insulation installed in or on the ceiling, walls, foundation, and ducts outside the conditioned spaces; U-factors and SHGC for fenestration. The certificate must also list the type and efficiency of heating, cooling and service water heating equipment.

MAINE BUILDING AND ENERGY CONSERVATION CODE Summary of Basic Requirements

For questions or comments please contact Kris Beaudoin (Building Inspector), at 207-333-6601 ext. 1150 or by email at kbeaudoin@auburnmaine.gov