

Maine Energy Code

"Tell me what I have to do tour."

Residential 2009 to 2015 IECC Changes

Presented by:

Paul Demers, State Building Official

Office of State Fire Marshal

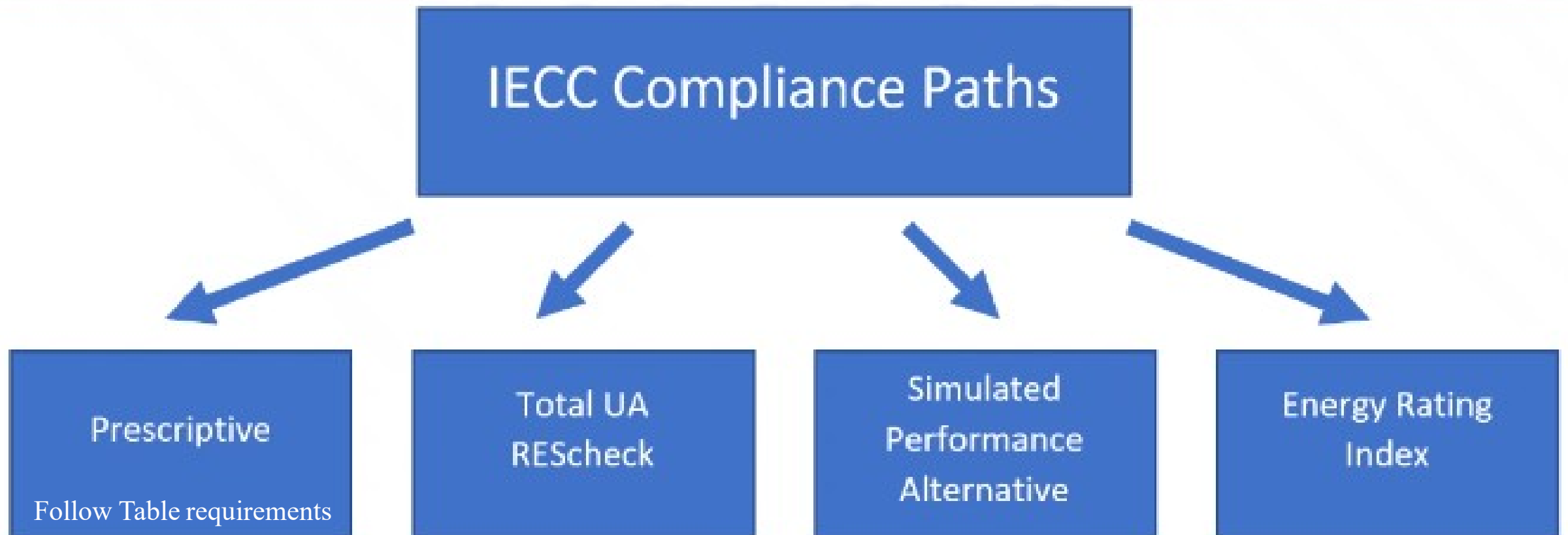


MUBEC

Maine Uniform Building and Energy Code

- **Adopted 2010**, Amended Jan. 23, 2018
 - 2015 IRC
 - 2015 IBC
 - 2015 IEBC
 - 2009 IECC - **2015 IECC Adopted & Effective July 1, 2021**
- **Requires local enforcement in municipalities over 4000 residents**
- **For municipalities with a population less than 4,000, enforcement of the code is up to the municipality:**
 - MUBEC (Maine Uniform Building and Energy Code)
 - Legislatively amended to become Statewide Code

Four available options - builder needs to choose one!



Prescriptive Requirements for Compliance

R402.1.2 Insulation and Fenestration Criteria

The [building thermal envelope](#) shall meet the requirements of Table R402.1.2, based on the [climate zone](#) specified in Chapter 3.

TABLE R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ^a										
CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b, e}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ⁱ	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^c WALL R-VALUE
6	0.32	0.55	NR	49	20+5 or 13+10 ^h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20+5 or 13+10 ^h	19/21	38 ^g	15/19	10, 4 ft	15/19

For SI: 1 foot = 304.8 mm.

- c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- g. Or insulation sufficient to fill the framing cavity. R-19 minimum.
- h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
- i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

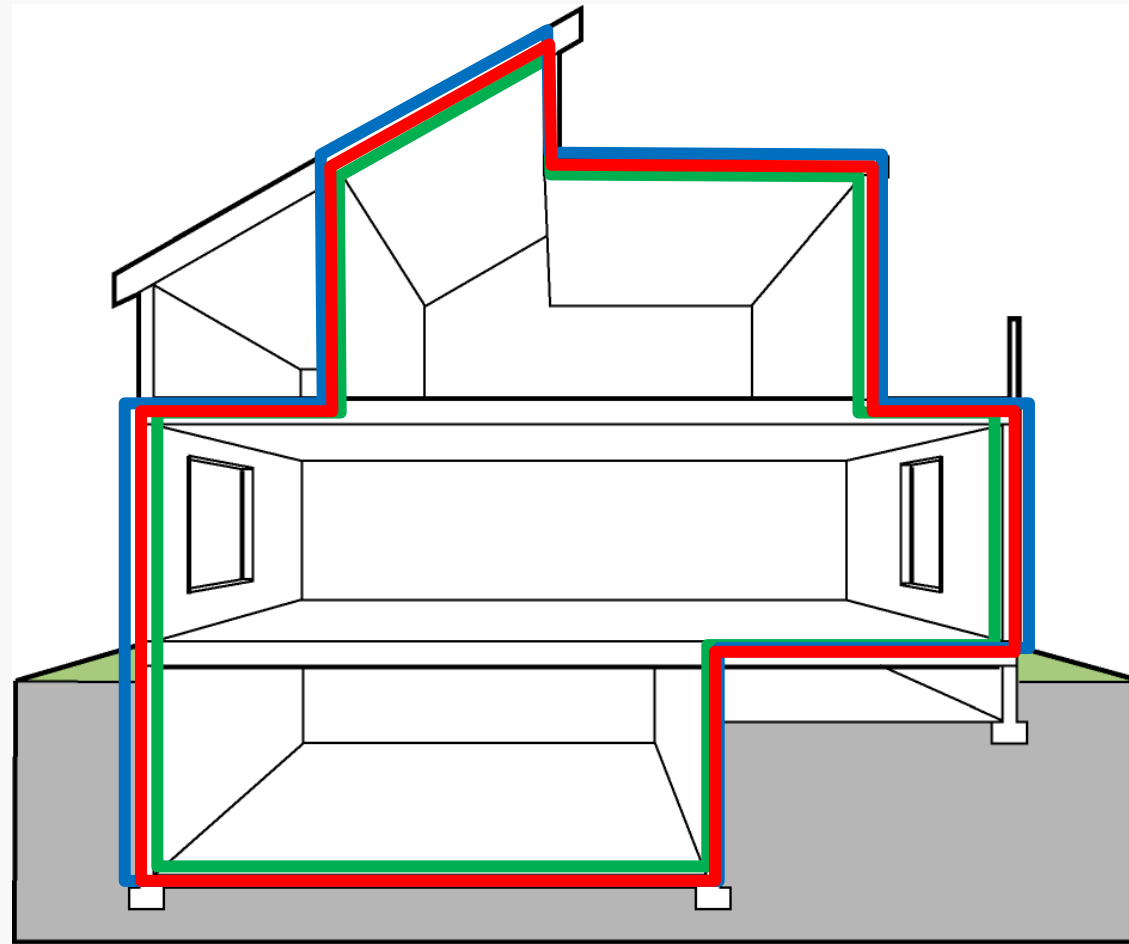
House as a System

Building Thermal Envelope

Air Barrier

Thermal Boundary

Vapor Retarder



Air Leakage

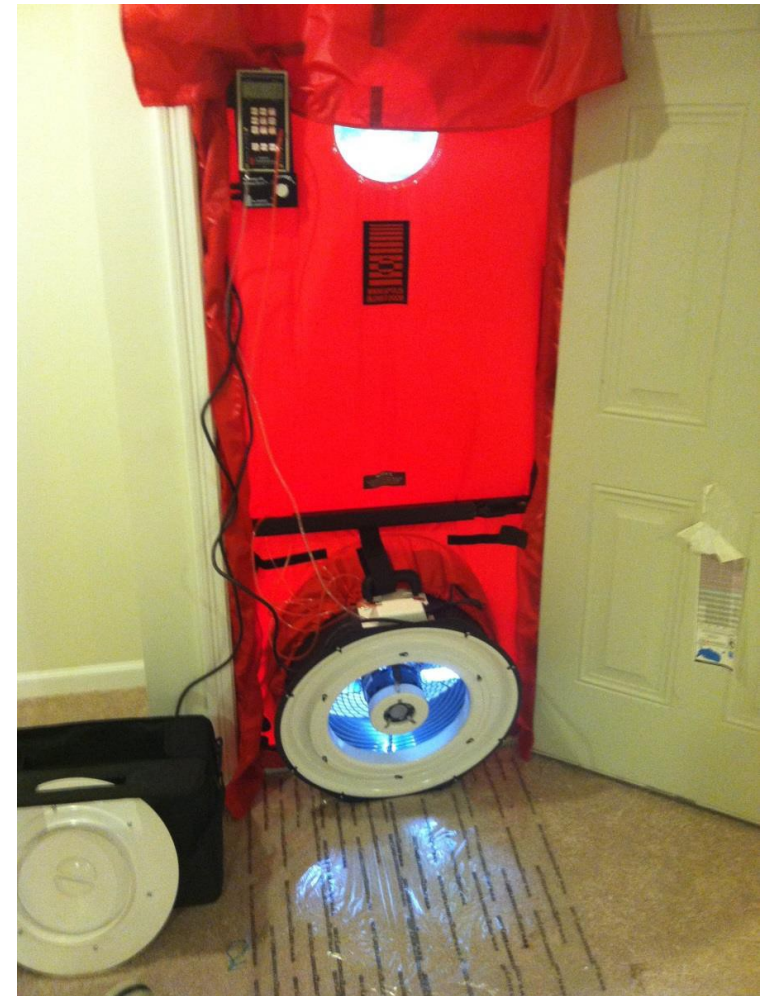
Blower Door

Components

- Calibrated Variable-Speed Fan
- Calibrated Manometer
- Mounting System

Operation

- Typically a Depressurization Test
- Simulates a 20 MPH wind on all sides
- Measures Air Leakage in CFM50
 - Cubic Feet per Minute
 - Pascal – a unit of air pressure
 - 249 Pascals = 1.0 IWC (Inches of Water Column)



Air Leakage

Air Change per Hour

Testing R402.4.2.1

- OPTIONAL
- Approved 3rd Party
- Written Report

7 ACH50 or Less

Testing R402.4.1.2

- **MANDATORY**
- Approved 3rd Party
- Written Report

Not Exceeding 3 ACH50

Calculation

- ACH50 (Air Change per Hour at 50 Pascals)

$$\frac{\text{CFM50} \times 60}{\text{VOLUME}} = \text{ACH50}$$

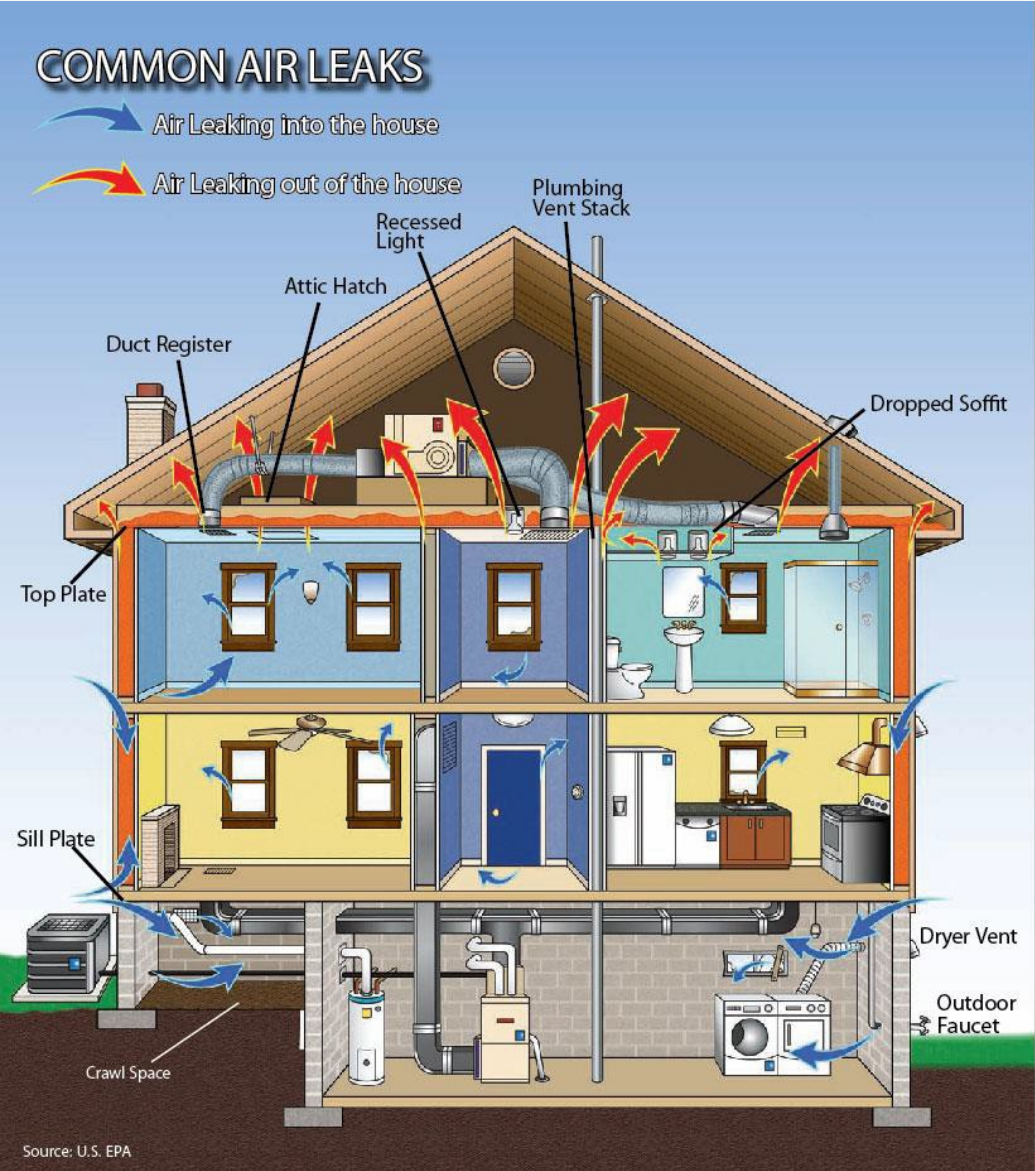


Air Leakage

Common Air Leaks

Components

- Ceiling/Attic
- Walls
- Windows
- Skylights
- Doors
- Rim Joists
- Floors
- Crawlspace/Basement
- Shafts
- Penetrations
- Garage Separation
- HVAC
- Sprinklers



*Form to be provided at the end of presentation

2015 IECC Air Barrier and Insulation Installation Table 402.4.1.1*		FRAMER	PLUMBER	INSULATION	DRYWALL
COMPONENT	AIR BARRIER CRITERIA / INSULATION INSTALLATION CRITERIA				
General Requirements	A continuous air barrier shall be installed in the building envelope.	X	X		X
	The exterior thermal envelope contains a continuous air barrier.	X	X		X
	Breaks or joints in the air barrier shall be sealed.	X	X	X	X
	Air-permeable insulation shall not be used as a sealing material.	X	X	X	X
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed.	X	X		X
	Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.	X			X
Walls	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	X			X
	The junction of the foundation and sill plate shall be sealed.	X	X		X
	The junction of the top plate and top of exterior walls shall be sealed.	X			X
	Knee walls shall be sealed.	X			X
Windows, skylights and doors	Cavities within corners and headers of framed walls shall be insulated by completely filling the cavity with a material having thermal resistance of R-3 per inch minimum.	X	X		X
	Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	X	X		X
Rim joists	The space between window/door jambs and framing and skylights and framing shall be sealed.	X			X
Floors (including above-garage and cantilevered floors)	Rim joists shall include the air barrier.	X			X
	Rim joists shall be insulated.	X			X
Crawl space walls	The air barrier shall be installed at any exposed edge of insulation.	X	X		X
	Insulation shall be installed to maintain permanent contact with underside of subfloor decking or floor framing cavity insulation shall be permitted to be in contact with top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	X			X
Shafts, penetrations	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	X			X
	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.	X			X
Narrow cavities	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	X	X	X	X
Garage separation	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.	X			X
Recessed lighting	Air sealing shall be provided between the garage and conditioned spaces.	X			X
Plumbing and wiring	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	X	X		
Shower/tub on exterior wall	Recessed light fixtures installed in the building thermal envelope shall air tight and IC rated.	X	X		
Electrical/phone box on exterior walls	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	X			X
HVAC register boots	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the shower and tubs.	X	X		X
Concealed sprinklers	Exterior walls adjacent to showers and tubs shall be insulated.	X	X		X
	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.	X	X		X
	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.	X			X
	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	X	X		

*NOTE: This document is intended solely to help demonstrate the air leakage and insulation provisions of table 402.4.1.1 of the 2015 IECC. It does not cover all air sealing/insulation locations or techniques. Trade responsibilities are decided by the builder, this document identifies the most common trade to line item. Refer to the code language and consult a code official for further advisement.

Mechanical Ventilation

<https://www.redcalc.com/>

ASHRAE 62.2 (2013)

ASHRAE 62.2 (2016)

There's an
APP for That



4/13/2021 RED Calc Free : ASHRAE 62.2-2016 Ventilation

ASHRAE 62.2-2016 Ventilation [Reset] [Print]

New or existing construction [New]
 Dwelling unit is [Detached]
 Use infiltration credit [Yes]

Closest weather station [United States]
 [Maine]
 [Augusta Airport]

Weather and shielding factor [1/hr] = 0.58

Floor area [ft²] [2080]
 Number of occupants [3]
 Dwelling height [ft] [18]
 Measured leakage @ 50Pa [CFM] [900]

☒ **Use Advanced Blower Door Inputs**

Blower door test type [Depressurization]
 Indoor temperature [°F] [65]
 Outdoor temperature [°F] [35]
 Altitude [ft] [68]
 Pressure exponent [0.65]
 Adjusted leakage @ 50Pa [CFM] = 853

Dwelling-Unit Ventilation Results

Effective annual avg infiltration rate [CFM] = 35
 Total required ventilation rate, Q_{tot} [CFM] = 84.9
 Infiltration credit, Q_{inf} [CFM] = 35
 Required mechanical ventilation rate, Q_{fan} [CFM] = 49

Dwelling-Unit Ventilation Run-Time Solver

Fan capacity [CFM] [80]
 Fan run-time per hour [min] = 37.1


Dwelling-Unit Leakage Rate Solver

Target mechanical ventilation rate [CFM]
 Corresponding measured leakage @ 50Pa [CFM] =

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<https://www.redcalc.com/ashrae-62-2-2016/>

1/1



i

ASHRAE 62.2-2016 Ventilation

New or existing construction New ▼

Dwelling unit is Detached ▼

Use infiltration credit Yes ▼

Closest weather station United States ▼

Maine ▼

Sanford Muni (AWOS) ▼

Weather and shielding factor [1/hr] = 0.57

Floor area [ft²] 1872

Number of occupants 5

Dwelling height [ft] 19

Measured leakage @ 50Pa [CFM] 594.3

☐ **Use Advanced Blower Door Inputs**

Dwelling-Unit Ventilation Results

Effective annual avg infiltration rate [CFM] 25

Total required ventilation rate, Q_{tot} [CFM] 93.66

Infiltration credit, Q_{inf} [CFM] 25

Required mechanical ventilation rate, Q_{fan} [CFM] 69

Dwelling-Unit Ventilation Run-Time Solver

Fan capacity [CFM]

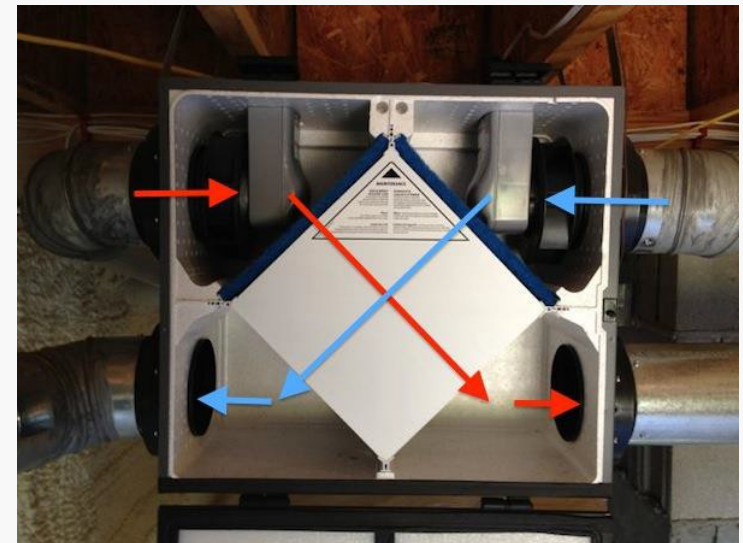
Fan run-time per hour [min] =

Dwelling-Unit Leakage Rate Solver

Target mechanical ventilation rate [CFM]

Corresponding measured leakage @ 50Pa [CFM] =

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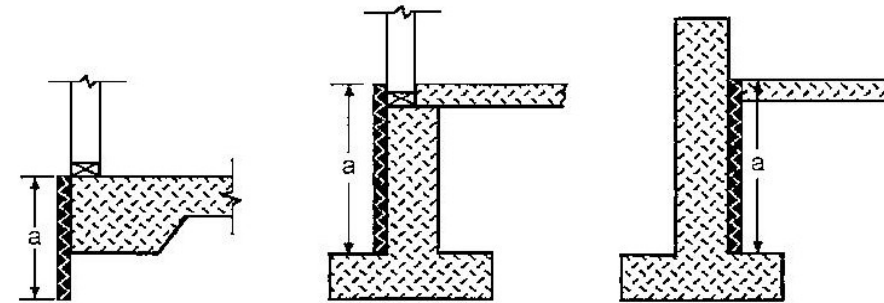
Slabs

CLIMATE ZONE	SLAB ^d R-VALUE & DEPTH
6	10, 4ft
7	10, 4ft

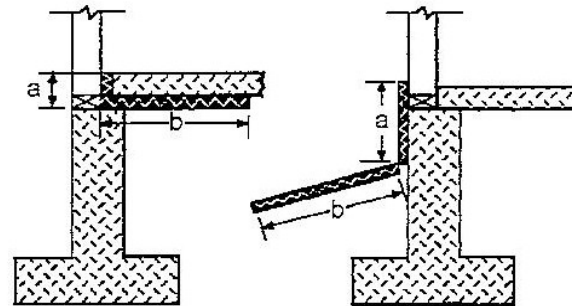
Applies to slabs with a floor surface < 12 inches below grade

- R-10 (typically 2 inches) insulation in Zones 4 and above
- Must extend downward from top of slab a minimum of 48" (Zones 6, 7, and 8)
- Insulation can be vertical or extend horizontally under the slab or out from the building
- Insulation extending outward must be under 10 inches of soil or pavement

^D An additional R-5 at slab edge is required for heated slabs



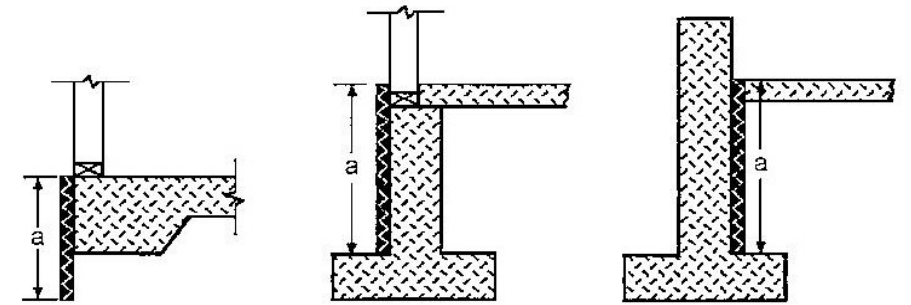
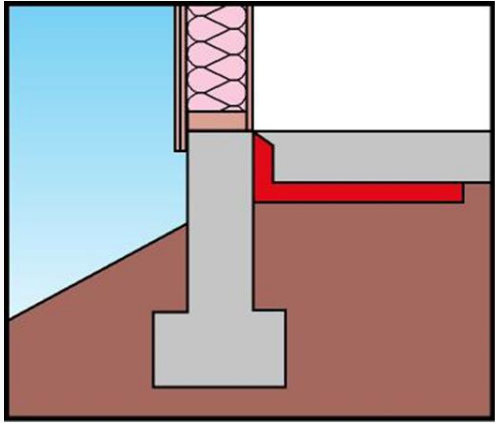
$a = \text{insulation depth}$



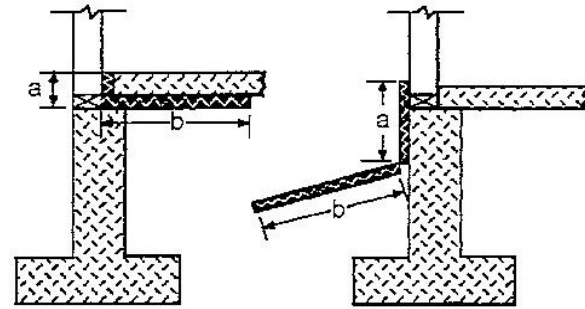
$a + b = \text{insulation depth}$

Figure 402.2.8
SLAB INSULATION METHODS

Slabs



$a = \text{insulation depth}$



$a + b = \text{insulation depth}$

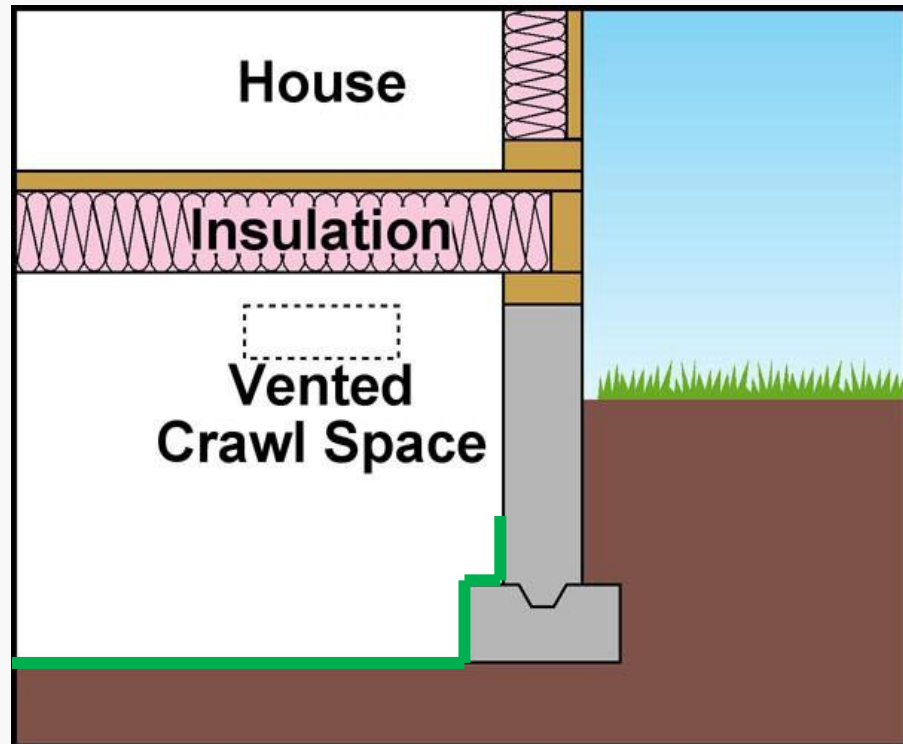
Figure 402.2.8
SLAB INSULATION METHODS

Crawlspace and Basements

Ventilated

IRC R408.1 **Ventilation:** The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement) shall have ventilation openings through foundation walls or exterior walls.

- Minimum opening > 1 SF for each 150 SF of under-floor area
- Class 1 Vapor Retarder on ground, opening > 1 SF for each 1,500 SF.

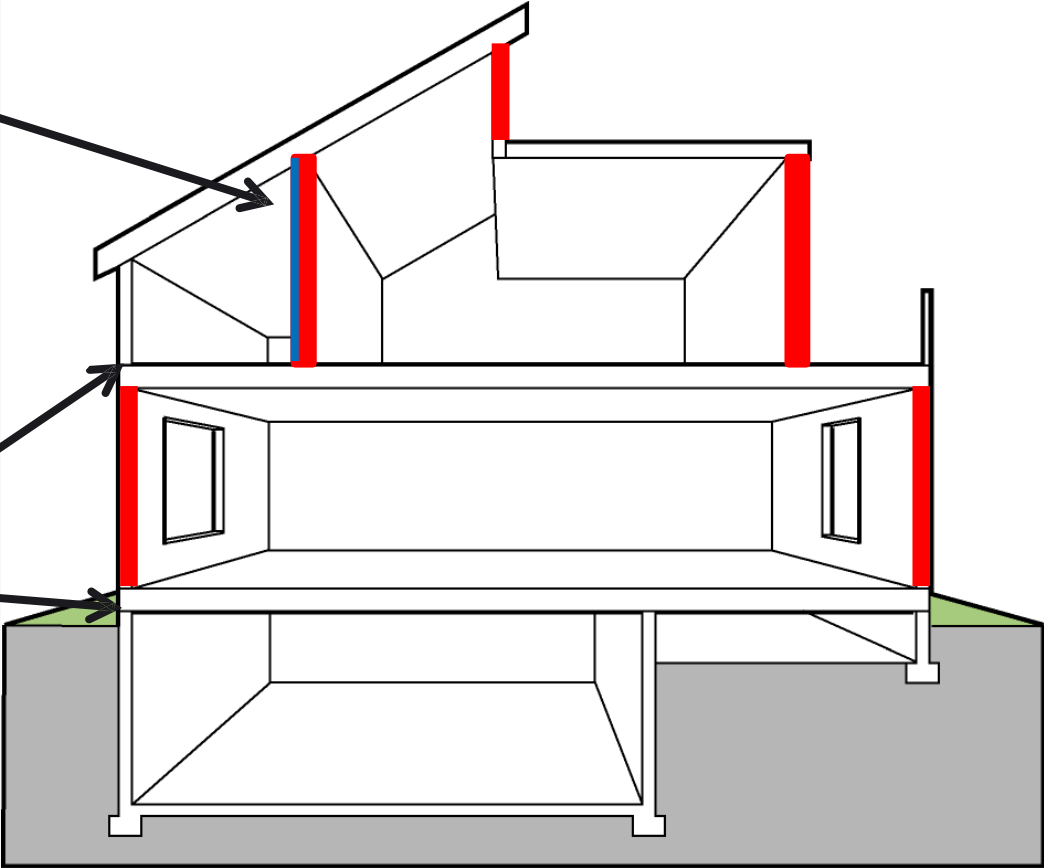


Wood Frame Wall

CLIMATE ZONE	WOOD FRAME WALL R-VALUE	
6	20 or 13+5 ^h	20+5 or 13+10 ^h
7	21	20+5 or 13+10 ^h

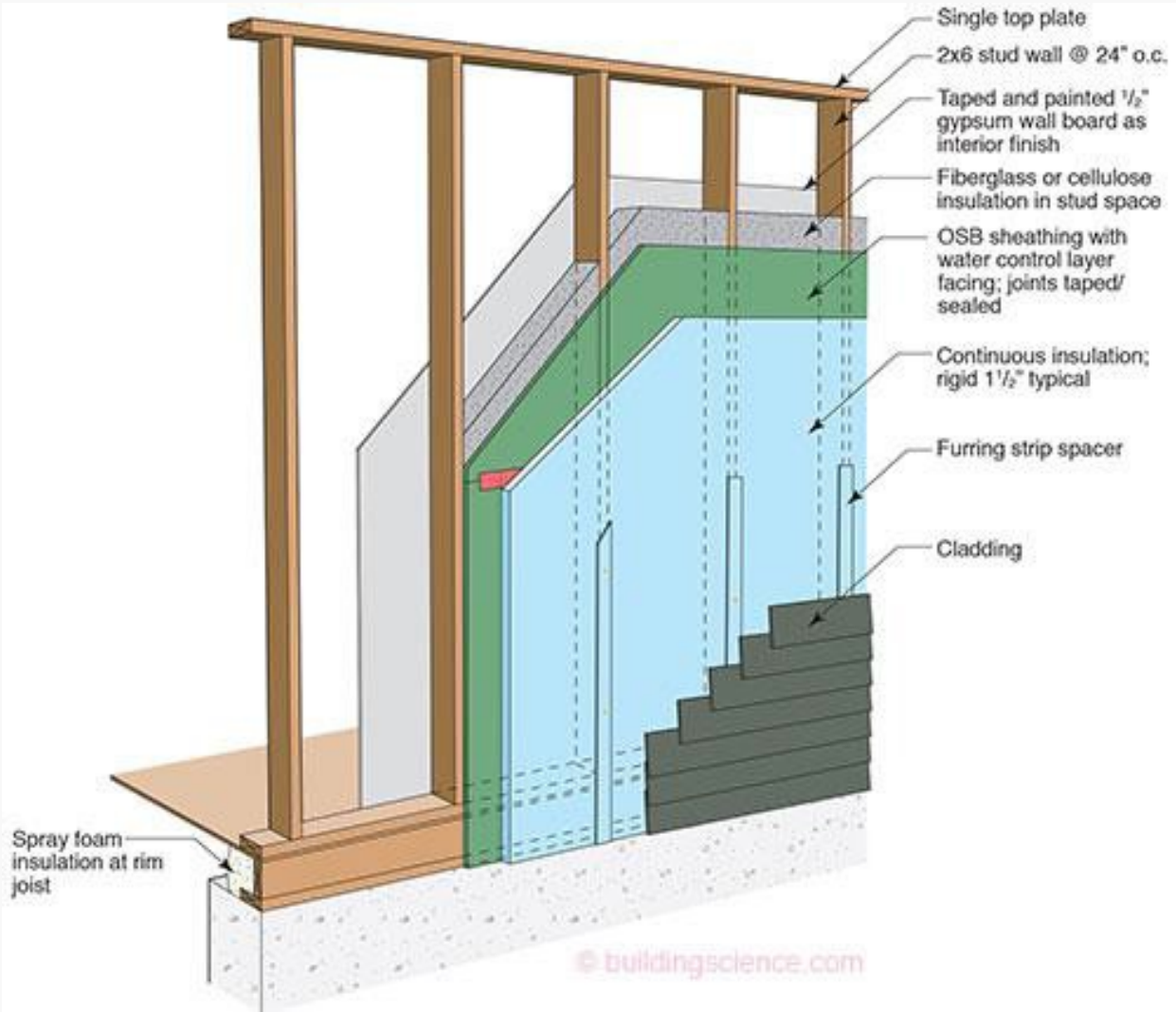
Insulate walls including those next to unconditioned spaces

Don't forget to insulate rim/band joists



Wood Frame Wall

CLIMATE ZONE	WOOD FRAME WALL R-VALUE	
6	20 or 13+5 ^h	20+5 or 13+10 ^h
7	21	20+5 or 13+10 ^h

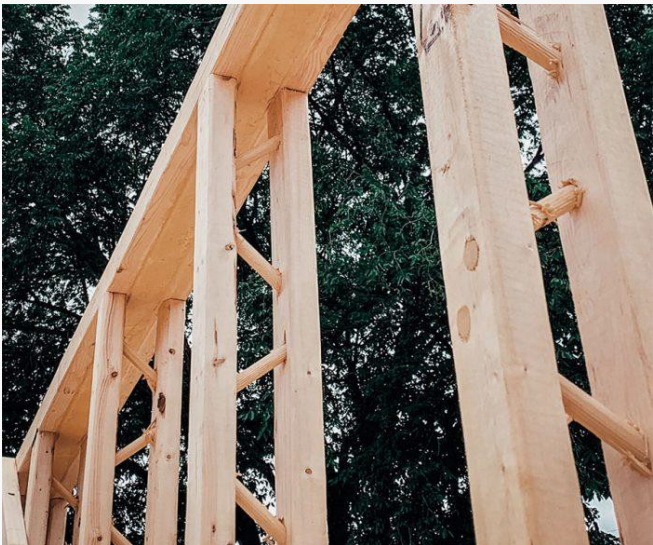


Wood Frame Wall

Advanced Framing

CLIMATE ZONE	WOOD FRAME WALL R-VALUE	
6	20 or 13+5 ^h	20+5 or 13+10 ^h
7	21	20+5 or 13+10 ^h

FRAME WALL EQUIVALENCY U-FACTOR
0.045
0.045



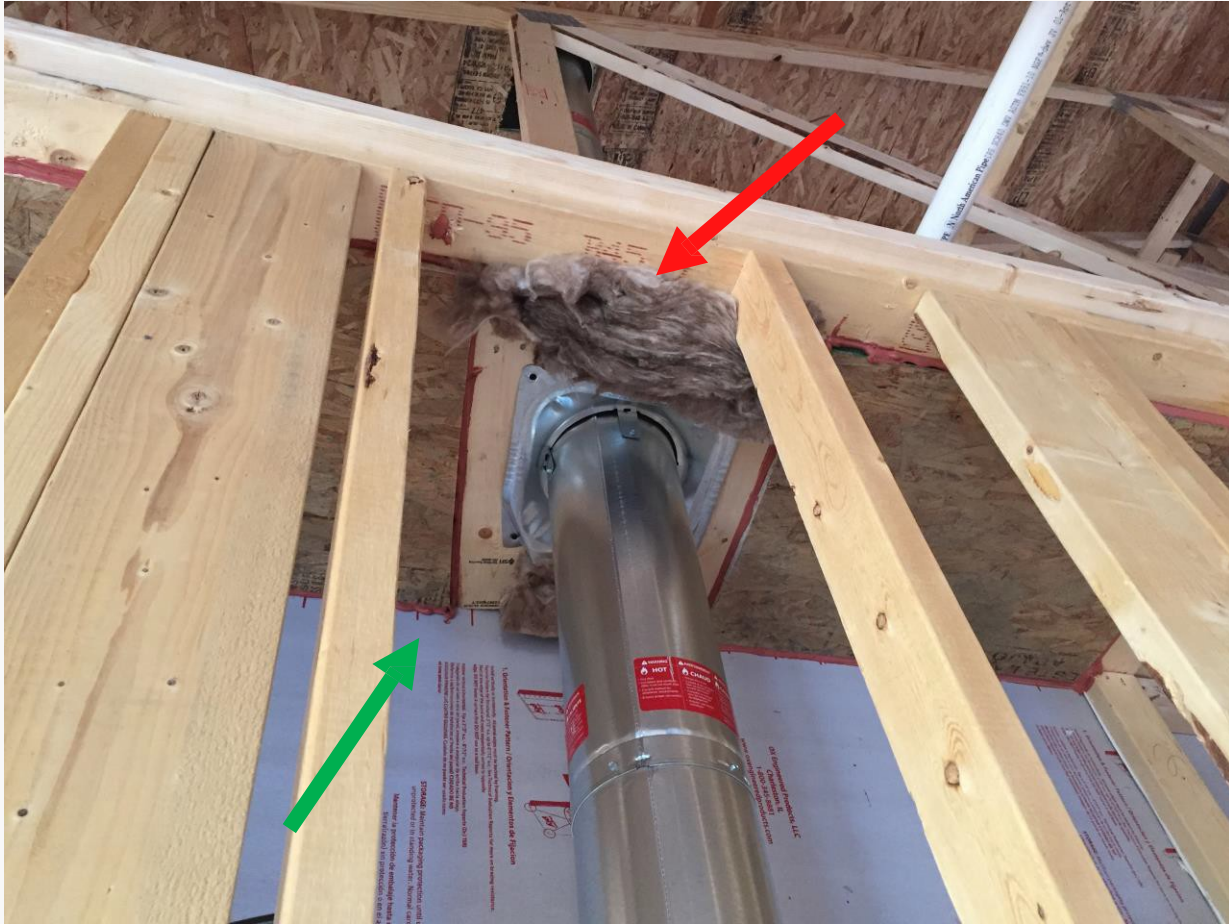
Wood Frame Wall

Air Sealing



Ceiling

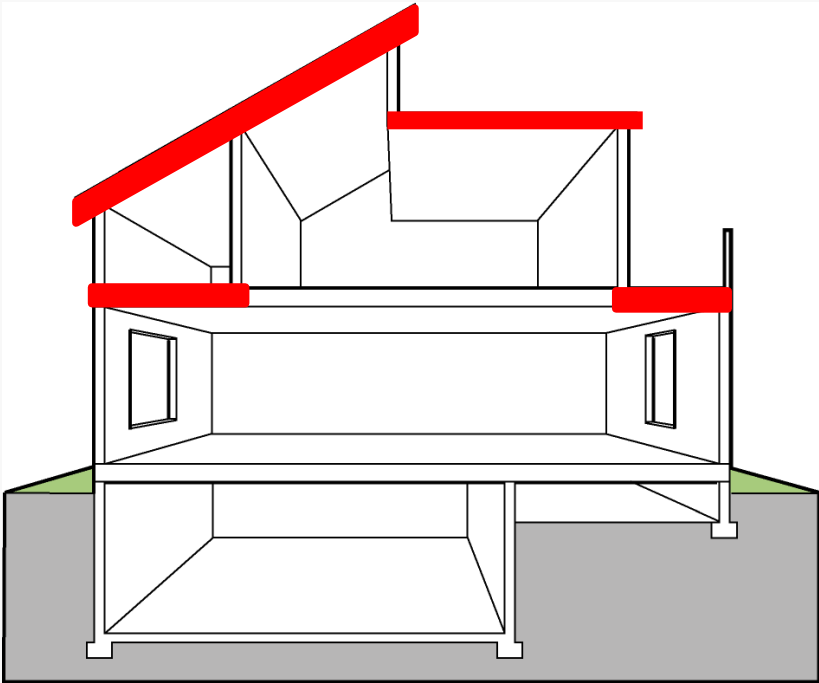
Air Sealing



Ceiling

Insulation

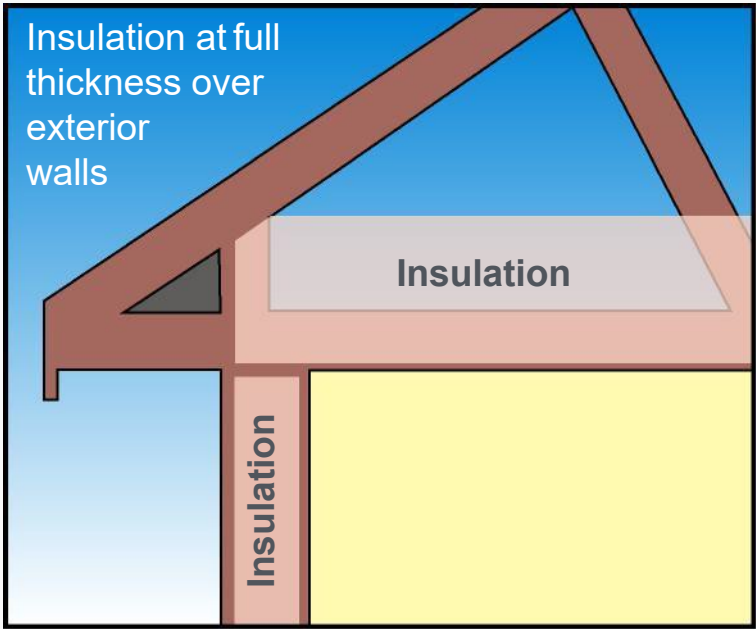
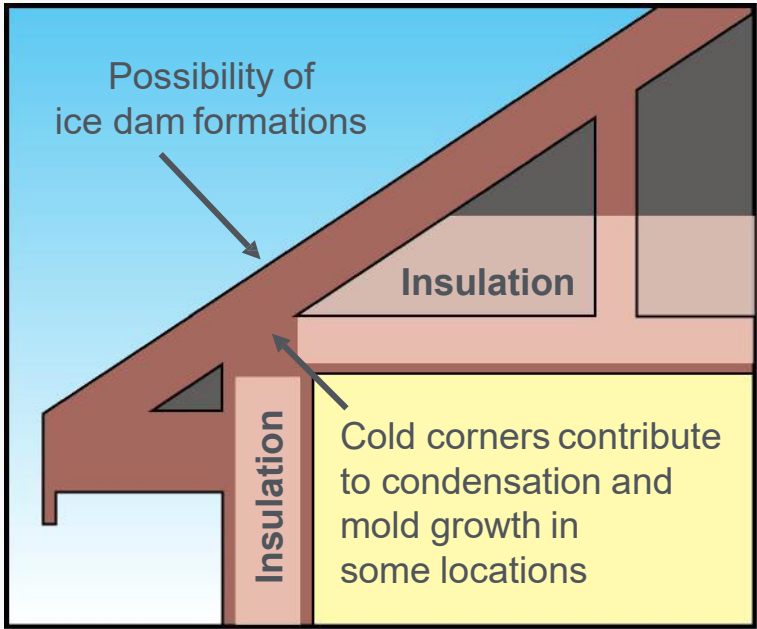
CLIMATE ZONE	CEILING R-VALUE
6	49
7	49



Ceiling

Insulation

CLIMATE ZONE	CEILING R-VALUE
6	49
7	49



Prescriptive R-value path encourages raised heel truss (aka, energy truss)

- If insulation is full height over exterior wall top plate
- R-38 complies where R-49 is required

Ceiling

Insulation

CLIMATE ZONE	CEILING R-VALUE
6	49
7	49



- Where Insulation levels are required R-49
- Not sufficient amount of space to meet higher levels
- R-38 allowed for 500 ft² or 20% total insulated ceiling area, whichever is less



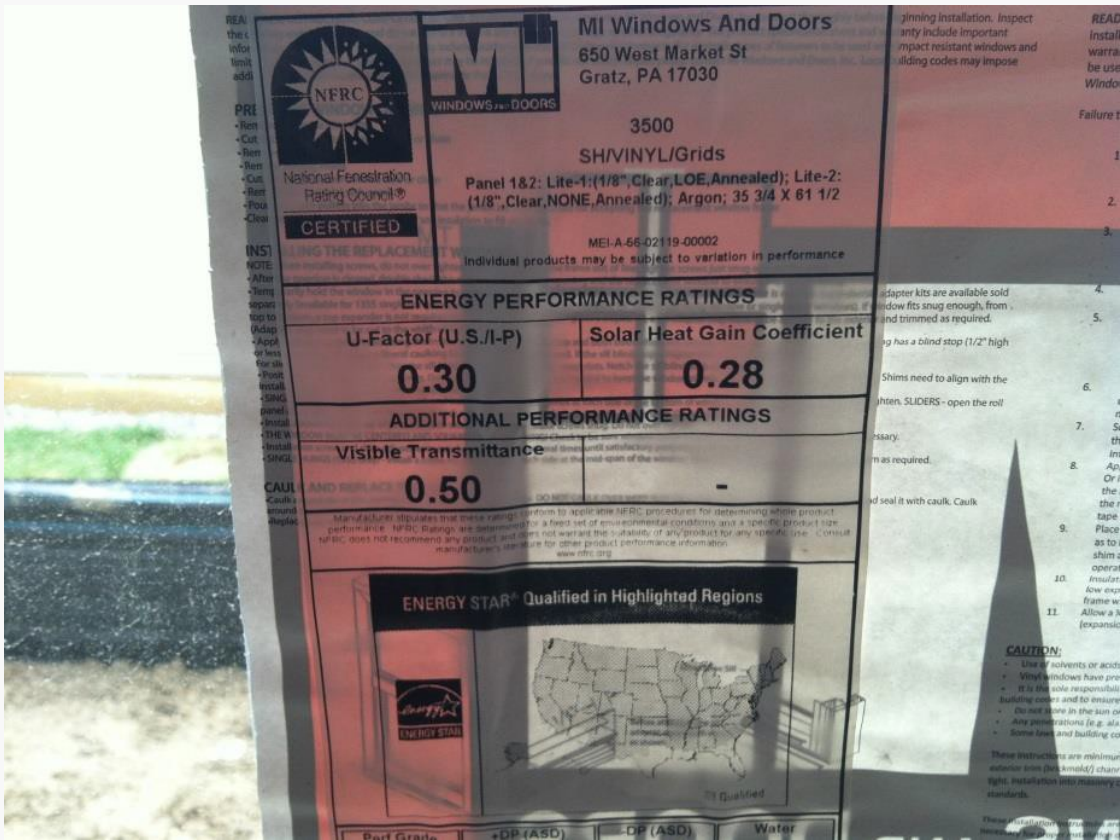
Fenestrations

Windows

CLIMATE ZONE	FENESTRATION U-FACTOR ^b		GLAZED FENESTRATION SHGC ^{b, c}	SKYLIGHT ^b U-FACTOR	
6	0.35	0.32	NR	0.60	0.55
7	0.35	0.32	NR	0.60	0.55

b – excludes skylights, SHGC applies to all glazed fenestrations
c – no SHGC requirements in Marine Zone

- Hard limits on U-factor in northern U.S. (cannot be exceeded, even in trade-offs), see exceptions:
 - Up to 15SF of glazed fenestrations shall be permitted to be exempt from U-factors and SHGC
 - Does not apply to U-factor Alternative or UA Alternative
 - Area Weighted Compliance: U-factors of individual windows or skylights can be higher if maximum area-weighted average is below these limits.
 - U-0.75 for skylights in Zones 4-8



HVAC

Duct Sealing

NOT SEALED



SEALED



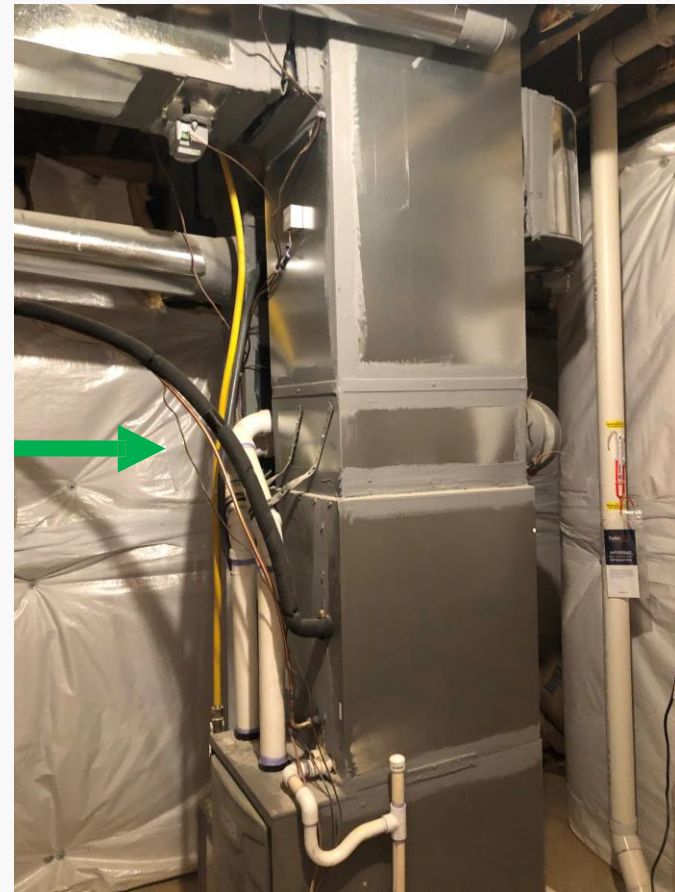
HVAC

Duct Sealing

NOT SEALED



SEALED



10/12/21, 10:56 AM

RESCheckWeb - Edit Project

Home » - Energy Code: 2015 IECC

Draft

If left unsaved, this project session will end in 68 minutes.

Project

Envelope

 Compliance (5.9%)

Check Compliance

Save

Report

Show all

Glazing requirements

Ceilings / Skylights (7 assemblies)

Add

	Ceilings	Assembly	Gross Area	Cavity Insulation R-Value	Continuous Insulation R-Value	U-Factor	
<div></div>	Lower scissor truss	Flat Ceiling or Scissor Truss	1194.7	20	40	0.016	<div></div>
<div></div>	Section 3 & 4 Flat	Flat Ceiling or Scissor Truss	793	20	40	0.016	<div></div>
<div></div>	Section 2 Flat R-38 Fiberglass	Flat Ceiling or Scissor Truss	82.5	38	0	0.03	<div></div>
<div></div>	Section 2 slope 2x12-16 R38c	Cathedral Ceiling Not all insulation air impermeable	202.5	38	0	0.027	<div></div>
<div></div>	Garage flat	Flat Ceiling or Scissor Truss	533	35	25	0.018	<div></div>
<div></div>	Garage slope 2x12-16 R38c	Cathedral Ceiling Not all insulation air impermeable	234	38	0	0.027	<div></div>
<div></div>	Doghouse slope 2x8-16 R30 compressed	Cathedral Ceiling Not all insulation air impermeable	50	22	0	0.046	<div></div>




































Walls / Windows / Doors (9 assemblies)

Add











	Walls	Assembly	Gross Area	Cavity Insulation R-Value	Continuous Insulation R-Value	U-Factor	
<div></div>	Garage/house wall	Wood Frame, 16" o.c.	180	21	0	0.057	<div></div>

Add

	Doors	Assembly	Gross Area	U-Factor	
<div></div>	ternatru door	Solid Door (under 50% glazing)	19.8	0.32	<div></div>

	Walls	Assembly	Gross Area	Cavity Insulation R-Value	Continuous Insulation R-Value	U-Factor	
   	Exterior walls	Wood Frame, 16" o.c.	4004	21	0	0.057	
<div>Add ▾</div>							
	Doors	Assembly	Gross Area	U-Factor			
   	termatru door	Solid Door (under 50% glazing)		19.8	0.32		
   	sto doors	Glass Door (over 50% glazing)		48.4	0.18		
   	ider	Glass Door (over 50% glazing)		114.1	0.18		
	Windows	Assembly	Gross Area	U-Factor			
   	uble Hung Windows	Vinyl Frame Double Pane w/ Low-E		482.6	0.3		
   	sement Windows	Vinyl Frame Double Pane w/ Low-E		43.8	0.3		
   	cture Windows	Vinyl Frame Double Pane w/ Low-E		181.4	0.26		

Foundations (2 assemblies)

<div>Add ▾</div>							
	Floors	Assembly	Gross Area	Cavity Insulation R-Value	Continuous Insulation R-Value	U-Factor	
   	Basement	Solid Concrete or Masonry	1826.4 ft²	0	16.25	0.047	
   	Garage ceiling	All-Wood Joist/Truss Over Unconditioned Space	670 ft²	38	0	0.026	



Generated by REScheck-Web Software

Compliance Certificate

Project Sample

Energy Code: **2015 IECC**
Location: **York County, Maine**
Construction Type: **Single-family**
Project Type: **New Construction**
Conditioned Floor Area: **3,474 ft2**
Glazing Area **18%**
Climate Zone: **6 (8499 HDD)**
Permit Date:
Permit Number:

Construction Site: Owner/Agent: Designer/Contractor:

Compliance: Passes using UA trade-off

Compliance: **1.2% Better Than Code** Maximum UA: **485** Your UA: **479**
The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling: Cathedral Ceiling	2,026	38.0	0.0	0.027	0.026	55	53
Ceiling under porch: Cathedral Ceiling	147	38.0	0.0	0.027	0.026	4	4
Wall - Exterior: Wood Frame, 16" o.c.	3,300	21.0	0.0	0.057	0.045	148	117
Front Entry Door: Solid Door (under 50% glazing)	40			0.320	0.320	13	13
Pella glass doors: Glass Door (over 50% glazing)	179			0.250	0.320	45	57
Pella windows: Wood Frame	485			0.250	0.320	121	155
Wall Garage: Wood Frame, 16" o.c.	329	21.0	0.0	0.057	0.045	18	14
Garage Entry Door: Solid Door (under 50% glazing)	21			0.320	0.320	7	7
Floor above garage: All-Wood Joist/Truss	397	38.0	0.0	0.026	0.033	10	13
Basement: Solid Concrete or Masonry Wall height: 6.0' Depth below grade: 4.3' Insulation depth: 6.0'	984	0.0	13.0	0.058	0.050	57	49
Flood vents: Solid Door (under 50% glazing)	8			0.120	0.320	1	3

State of Maine Energy Code **Handout**
IECC 2015

Maine Fire Marshal's Office
Building Codes Division
Phone: (207) 626-3876
Email: Shannon.e.quintal@maine.gov

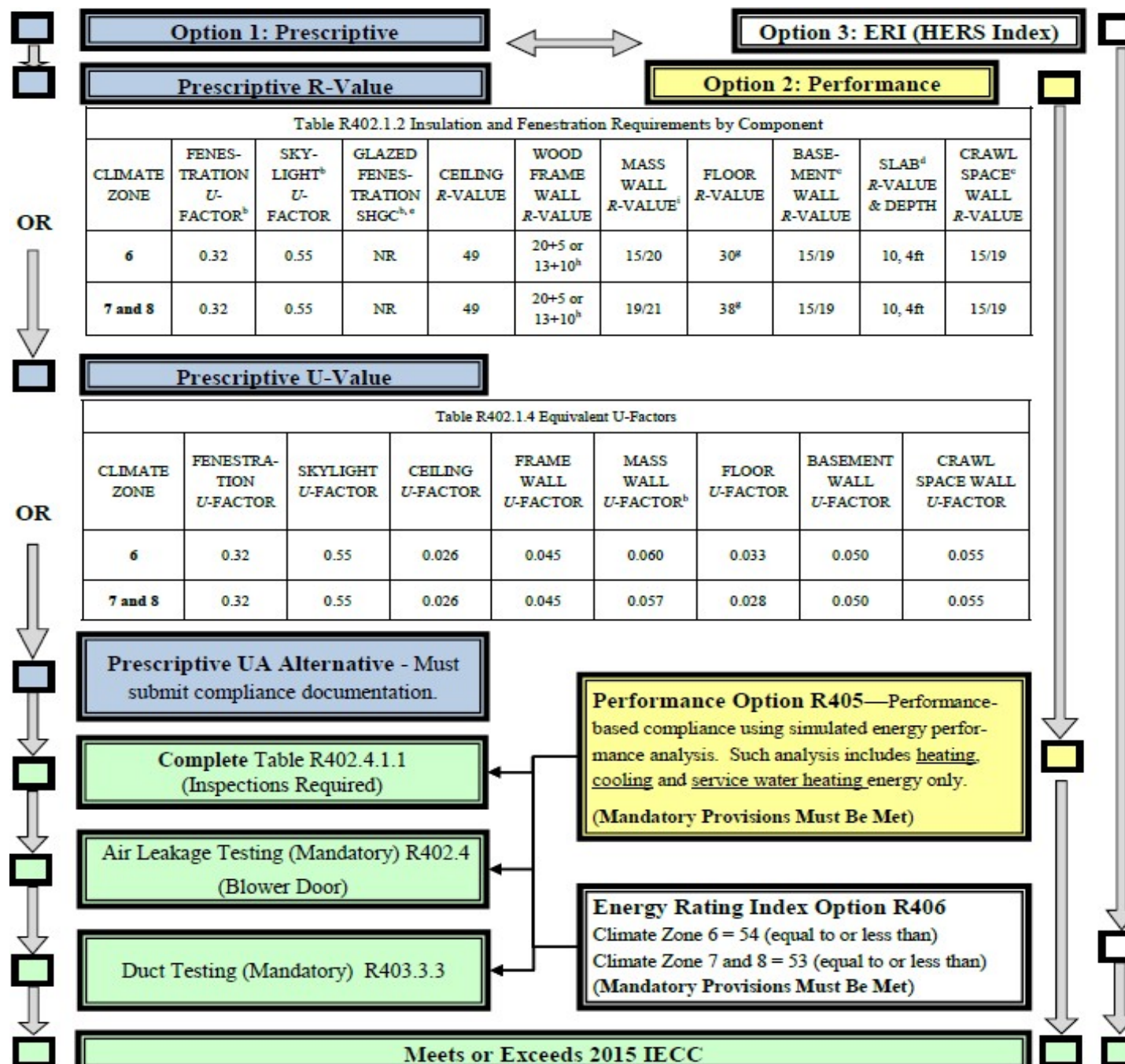
2015 IECC Residential Energy Code Compliance Path Options – Climate Zone 6A and 7A

The following handout reflects the requirements of the residential portions of the updated Energy Code (IECC 2015 Ed.) – the information below contains the tables for the R-Values and U-Factors for each component of a residential structure.

This handout is separated into three potential compliance options (paths):

All paths require compliance with the air sealing requirements on page 2.

- 1) Prescriptive (blue highlights) – defines the required levels of R/U (See Section R403)
*This method requires software (ResCheck or equivalent) use for “alternatives”
- 2) Performance (yellow highlights) – simulated modeling of entire building (See Section R405)
- 3) Energy Rating Index “ERI” (white highlights) – requires modeling comparison to IECC 2006 (See Section R406)



*NOTE: This document is only a guide for meeting IECC 2015, contact your local code official for further guidance.

State of Maine Energy Code **Handout**
IECC 2015

Maine Fire Marshal's Office

Building Codes Division

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Typical responsibility matrix

2015 IECC Air Barrier and Insulation Installation Table 402.4.1.1		BUILDER	FRAMER	ELECTRICIAN	PLUMBER	HVAC	INSULATION	DRYWALL
COMPONENT	CRITERIA							
General Requirements	<i>A continuous air barrier shall be installed in the building envelope.</i>	X	X				X	X
	<i>Exterior thermal envelope contains a continuous air barrier.</i>	X	X				X	X
	<i>Breaks or joints in the air barrier shall be sealed.</i>	X	X	X	X	X	X	
	<i>Air-permeable insulation shall not be used as a sealing material.</i>	X					X	
Ceiling/attic	<i>The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed.</i>	X	X				X	
	<i>Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.</i>	X					X	
	<i>The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.</i>	X	X				X	X
Walls	<i>The junction of the foundation and sill plate shall be sealed.</i>	X	X					
	<i>The junction of the top plate and top of exterior walls shall be sealed.</i>	X	X				X	X
	<i>Knee walls shall be sealed.</i>	X	X				X	
	<i>Cavities within corners and headers of framed walls shall be insulated by completely filling the cavity with a material having thermal resistance of R-3 per inch minimum.</i>	X	X				X	
	<i>Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.</i>	X	X				X	
Windows, skylights and doors	<i>The space between window/door jambs and framing and skylights and framing shall be sealed.</i>	X					X	
Rim joists	<i>Rim joists shall be insulated and include the air barrier.</i>	X	X				X	
Floors (including above-garage and cantilevered floors)	<i>The air barrier shall be installed at any exposed edge of insulation.</i>	X	X				X	
	<i>Insulation shall be installed to maintain permanent contact with underside of subfloor decking or floor framing cavity insulation shall be permitted to be in contact with top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.</i>						X	
Crawl space walls	<i>Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.</i>	X					X	
	<i>Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.</i>						X	
Shafts, penetrations	<i>Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.</i>	X		X	X	X	X	
Narrow cavities	<i>Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.</i>	X					X	
Garage separation	<i>Air sealing shall be provided between the garage and conditioned spaces.</i>	X					X	
Recessed lighting	<i>Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall, air tight and IC rated.</i>	X		X				
Plumbing and wiring	<i>Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.</i>						X	
Shower/tub on exterior wall	<i>The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the shower and tubs.</i>	X					X	
	<i>Exterior walls adjacent to showers and tubs shall be insulated.</i>	X					X	
Electrical/phone box on exterior walls	<i>The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.</i>	X	X	X			X	
HVAC register boots	<i>HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.</i>					X		
Concealed sprinklers	<i>When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.</i>	X			X			

Disclaimer: This document is intended solely to help demonstrate the air leakage and insulation provisions of table 402.4.1.1 of the 2015 IECC. It does not cover all air sealing/insulation locations or techniques. Other code provisions may be applicable as well.

Maine Energy Code

"Tell me what I have to do tour."

- 2009 to 2015 IECC Changes
- Insulation & Air Leakage

Questions?

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