



CERTIFICATE OF ZONING COMPLIANCE

**ONCE A COMPLETE APPLICATION IS SUBMITTED, IT TAKES 5-7 BUSINESS DAYS FOR PROCESSING.
A COMPLETE APPLICATION MEANS ALL REQUIRED ITEMS HAVE BEEN PROVIDED.**

- **NO WORK SHALL BEGIN UNTIL A CERTIFICATE HAS BEEN ISSUED AND POSTED.**
- **Certificates shall be posted and protected in a visible location on premises immediately upon being issued.**
- **AN AFTER-THE-FACT FEE WILL BE INCURRED IF WORK HAS BEGUN PRIOR TO APPROVAL BY THE LAND USE OFFICE.**
- **Please contact Dig Safe prior to any excavation. Bristol's Water & Sewer Department should be contacted directly (603-744-8411) or wateroffice@bristolnh.gov to locate service lines and valves 4 days in advance of any excavation, grading, or paving work.**

The applicant is legally responsible to ensure that all information in the application is correct and accurately represents the proposed project.

PLEASE READ THE INSTRUCTIONS ON PAGE 3 BEFORE FILLING OUT THE APPLICATION FORM. CALL THE PERMIT OFFICER 603-744-3354 Ext. 118 IF YOU HAVE ANY QUESTIONS. MISSING ITEMS WILL DELAY YOUR PERMIT.

The Land Use Office shall issue all Certificates of Zoning Compliance in accordance with RSA 676. No certificate shall be issued for the erection of any structure or for the use of land unless the proposal complies with the provisions of the Zoning Ordinance and meets all other local and State requirements.

The following projects require a Certificate of Zoning Ordinance Compliance:

- a) constructing or installing a new structure, including modular and mobile homes, sheds, barns, garages, docks, signs, and swimming pools
- b) changing any area in an existing structure into living space or non-living space
- c) installing patios that are slab, wood or raised, and any type of deck
- d) adding dwelling units to an existing structure
- e) adding or removing bedrooms, bathrooms or kitchens to an existing structure
- f) demolishing a structure
- g) installing or changing fences over six (6) feet tall
- h) installing or removing solar panels
- i) remodeling with a cost of \$15,000 or more for materials only during a single calendar year not included in (a)-(h) above

Ordinary repairs to structures may be made without a Certificate of Zoning Ordinance Compliance. Such repairs are limited to painting, siding, re-roofing (with like materials), window replacement, the construction of entry steps, landscaping, residential paving, and repair of accidental damage that does not involve structural modification. Refer to the adopted 2021 Driveway regulations for changes in residential paving.

NH Energy Code Certification is required from the NH Department of Energy:

- For all new homes using electric or fossil fuel for heat
- For additions with more than 150 square feet of floor space
- When spending more than 50% of the current value of the structure for alterations
- When winterizing a seasonal home or part of an existing structure, such as finishing a room over a garage

Additional items, permits, approvals may be needed if the property is in an Overlay District, has wetlands, is in the Floodplain, if the setbacks cannot be met, if height exceeds Zoning limits, if steep slopes are present, etc.



DATE RECEIVED: _____

BY: _____ M/L: _____

DISTRICT: _____

Fee Paid: _____

After-the-fact fees are 2x the regular fee.

Check# _____ Cash ☐ Other _____

CERTIFICATE OF ZONING COMPLIANCE APPLICATION

| Residential | | Commercial | |
|---|---|------------|---|
| | Minimum processing fee- \$50.00 - change of use - fence over 6 feet high - roofing (with new material) | | Minimum processing fee - \$100.00 - change of use - fence over 6 feet high - roofing (with new material) |
| | New one- or two-family dwelling \$50.00 + \$0.30 per square foot | | New multi-family dwelling \$100.00 + \$0.40 per square foot |
| | Residential addition/accessory structure \$35.00 + \$0.15 per square foot | | New commercial or industrial building \$100.00 + \$0.40 per square foot |
| | Interior alteration or renovation \$50.00 + \$0.30 per square foot | | Commercial addition/accessory structure \$50.00 + \$0.40 per square foot |
| | Energy Permit fee- \$125 (Solar or Wind) | | Commercial Interior alteration or renovation \$100.00 + \$0.40 per square foot |
| | | | Energy Permit fee- \$125 (Solar or Wind) |
| After-the-fact Compliance Fee (2X the regular fee) | | | |

Applicant's Name: _____

Owner or Agent

Name of Property Owner, if different: _____

Owner's Address: _____

Owner's Phone #/Email: _____

Agent's Address: _____

Agent's Phone #/Email: _____

Written permission to represent owner must be submitted with application.

Property/Project Street Address: _____

If applicable:

Written permission for a third party to represent the owner has been submitted.

☐ YES

Written permission of approval from an Association has been submitted.

☐ YES

Existing Use: _____

Proposed Use: _____

Residential, Industrial, Commercial, Other

Description of project: Include estimated start and finish dates; use separate sheet if needed.

Total Cost of the Project: _____

Excavation _____ Grading _____ Electrical _____ Foundation _____
 Plumbing/Heating _____ Carpentry _____ Materials _____ Labor _____

| Please include, if applicable: | YES | N/A | NOTES (Refer to Instructions for more information.) |
|--|--------------------------|--------------------------|--|
| Floor plan of existing building | <input type="checkbox"/> | <input type="checkbox"/> | |
| Floor plan of proposed building/addition | <input type="checkbox"/> | <input type="checkbox"/> | |
| Construction plans of proposed building/addition | <input type="checkbox"/> | <input type="checkbox"/> | |
| Change in number of bedrooms? | <input type="checkbox"/> | <input type="checkbox"/> | Yes # of bedrooms being added: |
| Change in number of dwelling units? | <input type="checkbox"/> | <input type="checkbox"/> | |
| Scaled Plot Plan: (* items must be on plan) | <input type="checkbox"/> | <input type="checkbox"/> | |
| *Location of building/addition and setbacks | <input type="checkbox"/> | <input type="checkbox"/> | |
| *Height of proposed building/addition | <input type="checkbox"/> | <input type="checkbox"/> | |
| *Exterior lighting locations/type | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is property in one of the Overlay Districts? | <input type="checkbox"/> | <input type="checkbox"/> | _ Shoreland _ Historic _ Pemi _ Wetlands _ Floodplain |
| Is the property affected by steep slopes? | <input type="checkbox"/> | <input type="checkbox"/> | |
| NH Energy Code required? See page 4 | <input type="checkbox"/> | <input type="checkbox"/> | New homes, Additions more than 150 sq ft, Winterizing, Alterations costing more than 50% of current market value |
| Septic approval required? | <input type="checkbox"/> | <input type="checkbox"/> | |
| Application for Water/Sewer required? | <input type="checkbox"/> | <input type="checkbox"/> | |
| Driveway permit required? | <input type="checkbox"/> | <input type="checkbox"/> | |
| NH Wetlands approval required? | <input type="checkbox"/> | <input type="checkbox"/> | |
| E911 Address required? | <input type="checkbox"/> | <input type="checkbox"/> | |

For a Solar Project: will the solar panels be: _____ Ground Mounted _____ Roof Mounted _____ N/A

_____ If roof mounted, verified structural calculations _____ Complete solar specifications
 _____ Diagram of wiring specifications _____ Plot plan showing placement of solar panels
 _____ Photos, sketches, and measurements of structure

I, the undersigned, do herein state to the best of my knowledge and belief that the proposed construction is compliant with all local, state, and federal codes, rules, and regulations, and that all information provided herein is correct and complete in accordance thereto.

DATE _____ SIGNATURE OF OWNER OR APPLICANT _____

Approved Certificate to be: _____ Mailed _____ Emailed _____ Picked-up

PLEASE NOTE: CERTIFICATES DO NOT TRANSFER WITH THE OWNERSHIP OF THE PROPERTY

INSTRUCTIONS

To AVOID LOSING CHANGES made to the form: Save the form to your hard drive. Open it in Adobe Acrobat or other PDF Reader. Links will open in a new browser window when clicked.

EXAMPLES of floor plans, plot plans, elevations, construction drawings, and solar wiring diagrams can be found on the Town website. <https://www.bristolnh.gov/land-use-department/pages/land-use-permits-applications>

- **Floor plan of existing building** – If this is for an addition to an existing structure, please show an outline of the existing structure and the location and size of the proposed addition.
- **Floor plan of proposed building/addition** – If this is for an addition to an existing structure, please show an outline of the existing structure and the location and size of the proposed addition.
- **Construction plans of proposed building/addition** – Provide detailed drawings of the building or construction project, illustrating its layout, components, framework, and dimensions.
- **Change in number of bedrooms:** If yes, enter how many additional bedrooms are being added or built. If no bedrooms are being added or built, check N/A.
- **Change in number of dwelling units?** Please note that the town of Bristol does NOT allow two (2) dwelling units on the same parcel unless they are attached.
- **Scaled Plot Plan – This is required and must include the following information:**
 - Location of building or addition on the parcel
 - Distance of building/addition to the rear, front and side setbacks (from the boundary line)
 - Height of proposed building/addition:
 - Building heights shall not exceed 35' or 28' in the Lake District (4.4 of the Zoning Ordinance)
 - Accessory buildings are limited to a height of 20' (4.18 of the Zoning Ordinance)
 - Structures (non-conforming) in the Lake District increasing in height by more than one foot must apply for a Special Exception (4.12 of the Zoning Ordinance)
- **Exterior lighting locations/type** – please note on the plan where any current outside lighting is located and where any new outside lighting will be located. Include the type of lighting being used.
- **Is the property located in one of the following Overlay Districts?**
Check map layers on Town website to make this determination.
 - Shoreland Protection Area – within 250' of Newfound Lake, Newfound River
 - Historic District (downtown area)
 - Pemigewasset Overlay District
 - Wetlands Conservation Overlay District
 - Floodplain Zone
- **Does the slope of the lot exceed 15%?** Hiring a professional and having a written statement of the slope may be the best for steep parcels where disturbance will be needed in order to build. There are several videos online that explain and demonstrate how to determine the slope of the lot.
- **Septic Approval Required?**
You need a NH Department of Environmental Services approved design if your septic system fails and you cannot replace it in the exact same location; or when you are expanding an existing structure (adding bedrooms, converting from seasonal to year round use, or changing use from residential to commercial); or when you are building a new house in an area that does not offer municipal sewer services.
- **Application for Water/Sewer required?**
An application for municipal water and/or sewer hook-up can be found at this link:
https://www.bristolnh.gov/sites/g/files/vyhlif2866/f/uploads/water_sewer_application_22_fillable_3.pdf

NH Energy Code required?

You must obtain certification from the State if you plan to:

- Build a new home with any provision at all for fossil or electric heat
- Construct a commercial structure under 4000 square feet
- Plan to spend more than 50% of the current value of the structure altering a structure
- Winterize a seasonal home or part of an existing structure, such as finishing a room over a garage
- Construct an addition with more than 150 square feet of total floor space

You may be exempt if you are:

- Siting a mobile home
- Siting a modular home certified by the NH Modular Home Program. Contact the Office of the Fire Marshall at 603-271-3294 for details.
- Making no provision for electric or fossil fuel heat
- Renovating or adding to a certified historic building

NOTE: Please submit the complete NH Energy Code Application to the NH Department of Energy at energycodes@energy.nh.gov Phone: 603.271.3670 Fax: 603.271.3878. DO NOT submit the application to the Town until it has been stamped by the State.

- **Driveway permit required?**

Town of Bristol Driveway Regulations can be found:

<https://www.bristolnh.gov/highway-department>

- **NH Wetlands Approval required?**

Activities located in wetlands and surface waters, such as excavation, removal, filling, dredging and/or construction of structures in or on any bank, flat, marsh, forested wetland or adjacent to waterbodies, generally requires review and approval from the Wetlands Bureau in accordance with the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Forms are available at: <https://onlineforms.nh.gov/Home/55919311-2291-44b6-bed0-1eb3355ac33b>

- **For a Solar Project**, in addition to the above, the following are also required:

- **If roof mounted**, verified structural calculations.
Structural calculations must be verified and stamped by a Licensed Engineer
 - **Plot plan** showing placement of solar panels.
Provide photos or sketches and measurements of the existing Structure, showing where the solar array will be mounted, the distance from the peak where the solar array will begin and the distance from the edge of the roofline where the solar array will end.
- **If ground mounted**, must provide a plot plan showing where on the parcel the solar panels will be located, the overall size of the solar array, show all structures, distances from boundary line, location of driveway and roads.
- **Complete solar specifications.**
Must provide specifications for all components of the solar array including data for the installation of solar panels.
- **Diagram of wiring specifications.**
Provide a diagram that shows the wiring specifications
- **Meter**
Note where the meter disconnect will be located

EXAMPLES of floor plans, plot plans, elevations, construction drawings, and solar wiring diagrams can be found on the Town website. <https://www.bristolnh.gov/land-use-department/pages/land-use-permits-applications>

New Hampshire Residential Energy Code Application
for Certification of Compliance for New Construction, Additions and/or Renovations of
Detached One- and Two-family dwellings and multi-family dwellings (townhouses) not over 3 stories
EC-1 Form

Minimum Provisions from 2018 IECC Chapter 4 [RE]

Effective Date: July 3, 2024 Rev.5

| | | | | | |
|--|---------|------|---|--------|------|
| <u>Owner/Owner Builder:</u> Company Name: (if applicable) | | | <u>General Contractor:</u> Company Name: | | |
| Name: | | | Name: | | |
| Mail Address: | | | Mail Address: | | |
| Town/City: | State: | Zip: | Town/City: | State: | Zip: |
| Phone: | Cell: | | Phone: | Cell: | |
| E-Mail: | | | E-Mail: | | |
| <u>Location of Proposed Structure:</u> | | | <u>Type of Construction:</u> | | |
| Tax Map #: _____ Lot #: _____ | | | <input type="radio"/> Residential <input type="radio"/> Small Commercial <input type="radio"/> New Building <input type="radio"/> Renovation <input type="radio"/> Addition <input type="radio"/> Thermally Isolated Sunroom <input type="radio"/> Modular Home: the site contractor must submit this 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. | | |
| Street: | | | | | |
| Town/City: | County: | | | | |
| <u>Zone 5</u> <input type="radio"/> Cheshire, Hillsborough, Rockingham Strafford | | | <u>Total New Conditioned* Floor Area:</u> | | |
| <u>Zone 6</u> <input type="radio"/> All other NH counties and town of Durham | | | _____ ft ² | | |
| | | | <u>Basement or Crawl Space type:</u> (*a conditioned space is one being heated/cooled, containing uninsulated ducts or w/ a fixed opening into conditioned space. Walls must be insulated) | | |
| | | | Conditioned? <input type="radio"/> Yes (Walls must be insulated) <input type="radio"/> No | | |
| | | | <input type="checkbox"/> Full Basement <input type="checkbox"/> Walk Out Basement <input type="checkbox"/> Slab on Grade <input type="checkbox"/> Other _____ | | |
| <u>Structure is EXEMPT because:</u> | | | <u>Form Submitted by:</u> | | |
| <input type="checkbox"/> Mobile Home <input type="checkbox"/> On an historic register | | | <input type="checkbox"/> Owner <input type="checkbox"/> Builder <input type="checkbox"/> Other _____ | | |

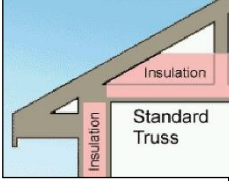
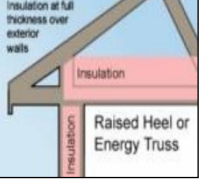
I hereby certify that all the information contained in this application is true and correct, and construction shall comply in all respects with the terms and specifications of the approval given by the local municipal code official or New Hampshire Department of Energy.

Signature _____ **Print Name** _____ **Date** _____

| | | |
|--|---------------------|--------------|
| <u>Official Use Only</u> | | |
| Date Complete Application Received: | Approved by: | Date: |
| Approval Number: | Stamp: | |
| | | |

Directions: Complete the "Your Proposed Structure" columns. No measurements or calculations are needed. Copies of plans are NOT needed. If you at least meet the Energy Code requirements, your project will be approved. Write N/A in any section that does not apply to your project. If your planned structure does meet these requirements, consider downloading REScheck <http://www.energycodes.gov/rescheck> to explore energy modelling options. **Please submit pages 1,2 and 3 only.**

YOUR PROPOSED STRUCTURE

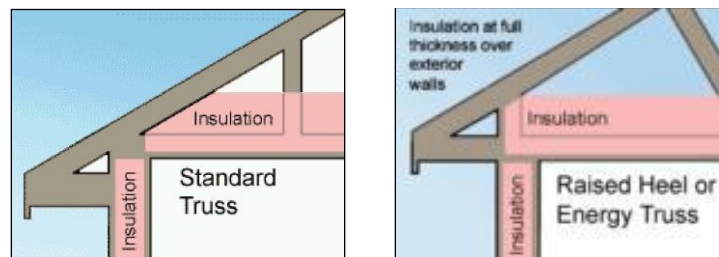
| Building Section | Required R or U Values | Write Planned R and U Values | Brands / Models / insulation type and thickness (if known) |
|---|--|--|--|
| Window U Factor (lower U is better) | U .30 (maximum) U-.32 (if log walls in Zone 5) U-.30 (if log walls in Zone 6) U .45 (Thermally Isolated Sunrooms only) | Write in U-Value | Check if <input type="checkbox"/> Sunroom <input type="checkbox"/> Log Walls |
| Skylights | U .55 (or less) U .70 (Thermally Isolated Sunrooms only) | | |
| Flat Ceilingⁱ <i>or</i> Flat Ceiling with Raised or Energy Trusses R-value | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>R-49 (Zone 5 or 6) if using the above construction technique R-49 if log walls</p> </div> <div style="text-align: center;">  <p>R-38 (Zone 5 or 6) if maintaining the full R value over the plates R-49 if log walls</p> </div> </div> | Write in R-Value → If using only R-38 in Zone 5 or 6 you must check this box | NOTE: R-38 will 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 5 or 6), you must certify that you will maintain R-38 over the plates by checking the box below. <input type="checkbox"/> <i>By checking this box, I certify that this 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.</i> |
| Sloped or Cathedral Ceiling | R-30 (Zone 5 & 6) if less than 500 ft sq or 20% of total ceiling area or as above R-24 (Thermally Isolated Sunrooms only) | Write in R-Value | Check if <input type="checkbox"/> Sunroom |
| Above Grade Wallⁱⁱ R-value | <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Zone 5: R-20 Cavity Insulation only <i>or</i> R-13 plus R-5 Cavity plus Continuous Insulation <i>or</i> Assembly U-Factor of, or less than 0.060 R-13 (Thermally Isolated Sunrooms only) </div> <div style="width: 45%;"> Zone 6: R-20 plus R-5 Cavity plus Continuous Insulation <i>or</i> R-13 plus R-10 Cavity plus Continuous Insulation <i>or</i> Assembly U-Factor of, or less than 0.045 R-13 (Thermally Isolated Sunrooms only) </div> </div> | Write in R-Value | Log homes must comply with ICC400-2017, have an average minimum wall thickness of 5" or greater with specific gravity of ≤0.5 or 7" with specific gravity >0.5. Check if <input type="checkbox"/> Sunroom <input type="checkbox"/> Log Walls |
| Door U-Value | U .30 (maximum) | Write in U-Value | One opaque door in the thermal envelope is exempt from the U-factor requirement. |
| Floor R Value (e.g., floor over Basement or garage) | R-30 <i>or</i> Insulation sufficient to fill joist cavity minimum R-19 | Write in R-Value | If conditioning the basement you must insulate Basement Walls . If not, you may |

| | | | |
|---|---|-------------------------|--|
| Basement or Crawl Space Wall R Value | For <i>both</i> Zone 5 and Zone 6 R-19 Cavity Insulation or R-15 Continuous Insulation | Write in R-Value | insulate either Floor or Basement Walls and Slab Edge (if $\leq 1'$ of grade) |
| Slab Edgeⁱⁱⁱ R Value | R-10 2' (Zone 5) 4' (Zone 6) (see drawing pg 3) <i>add R-5</i> if the Slab is heated or R-15 under entire heated slab if a log home. | Write in R-Value | Check if <input type="checkbox"/> Heated Slab |
| | | | |
| Air Sealing | A blower door test is required . The test must demonstrate an air exchange rate of <i>five</i> Air Changes per Hour (ACH) or less @ 50 Pa. | Blower Door | If required by the code official, an approved third party may be required to conduct the blower door test. |

Submit pages 1,2 and 3 to local municipal code official or NH Department of Energy at energycodes@energy.nh.gov
Phone: 603.271.3670 Fax: 603.271.3878

Footnotes to Residential Energy Code Application for Certification of Compliance

ⁱ Ceilings with attic spaces: R-38 in Zone 5 or 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 often 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.

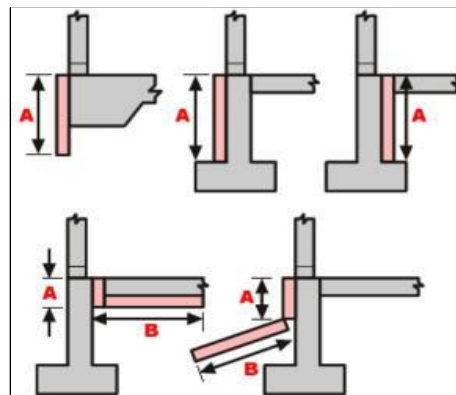


ⁱⁱ R-20 + R-5 means R-20 cavity insulation plus R-5 continuous insulation. A reduction of not more than R-3 of the required continuous insulation is permitted where the structural sheathing covers 40% or less of the gross area of the exterior walls.

ⁱⁱⁱ Slab edge insulation must start at the top of the slab edge and extend a total of two (Zone 5) or 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 two feet in Zone 5 or four feet in Zone 6

MODULAR HOMES must be certified by the NH Department of Safety. Unless the floor insulation is provided by the manufacturer this form may be submitted. This form may 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.

Residential IECC Chapter 4 [RE]

The following list is intended as a general summary of energy related requirements.

Please consult the 2018 IECC Chapter 4 [RE] for complete requirements.

| | | |
|--|--|---|
| | <p align="center">Air Leakage Code Section R402.4</p> | <p>The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of IECC Sections R402.4.1 through R402.4.5. The building thermal envelope must be durably sealed to limit infiltration. See Table R402.4.1.1 for a list of thermal envelope elements and installation criteria.</p> <p>Building envelope air tightness shall be verified to comply by Blower Door testing to not exceed air leakage of 5 Air Changes per Hour (ACH) at 50 Pascals pressure. The local Building Official may require an independent 3rd party to conduct the test.</p> |
| | <p align="center">Testing Code Section R402.4.1.2</p> | <p>The Blower Door Test is the required method to demonstrate code compliance with the air leakage requirement.</p> <p>Blower Door Test conducted by: _____</p> <p>Result (at 50 Pa): _____ CFM Interior Volume _____ CF _____ ACH</p> |
| | <p align="center">Fireplaces Code Section R402.4.2</p> | <p>New wood-burning fireplaces shall have tight-fitting flue dampers or doors and outdoor combustion air.</p> |
| | <p align="center">Recessed Lighting Code Section R402.4.5</p> | <p>Recessed lights in the thermal envelope 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.</p> |
| | <p align="center">High-Efficacy Lighting Code Section R404.1</p> | <p>Not less than 90 percent of the lamps in permanently installing lighting fixtures shall contain only high-efficacy lamps.</p> |
| | <p align="center">Materials and Insulation Identification Code Section R103.2 and R303.1</p> | <p>Materials, systems and equipment shall be identified in a manner that will allow a determination of code compliance. 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.</p> |
| | <p align="center">Pull-Down Attic Stairs, Attic Hatch, and Access Doors Code Section R402.2.4</p> | <p>Should be insulated to a level equal to the surrounding surfaces and tightly sealed and weather-stripped at the opening. Access that prevents damaging or compressing insulation shall be provided to all equipment. A baffle or retainer shall be provided to prevent loose fill insulation from spilling from the attic access.</p> |
| | <p align="center">Access Hatches and Doors Codes Sections R402.4 and R402.3.4</p> | <p>All doors leading from a conditioned space into an unconditioned space such as an attic or basement should be insulated to a level equal to the surrounding space and weather-stripped or rated door units meeting the U-factor requirement. One door less than 24 square feet is exempt.</p> |
| | <p align="center">Duct Insulation Code Section R403.3.1</p> | <p>Supply and return ducts in attics must be insulated to at least R-8 where 3 in. diameter or greater and not less than R-6 for ducts smaller than 3 in. diameter. Supply and return ducts in other portions of the building must be insulated to at least R-6 where 3 in. diameter or greater and not less than R-4.2 for ducts smaller than 3 in. diameter. Exception: Ducts or portions thereof located completely inside the building thermal envelope.</p> |
| | <p align="center">Duct Construction Code Sections R403.3.2 and R403.3.5</p> | <p>Ducts, air handlers and filter boxes shall be sealed. Joints and seams must comply with the <i>Int. Mech. Code</i> or Section M1601.4.1 of the <i>International Residential Code</i>. Building framing cavities shall not be used as ducts or plenums (neither supply nor return).</p> |

| | | |
|--|---|---|
| | <p align="center">Duct Testing Code Sections R403.3.3</p> | <p>Ducts shall be pressure tested to determine air leakage by either 1) rough-in test or 2) post-construction test. Rough in Test: Ducts must be no leakier than 6 CFM per 100 sqft of conditioned floor area with air handler installed or 4 CFM per 100sqft without the air handler installed. Post Construction: Ducts must be no leakier than 8 CFM per 100 sqft of conditioned floor area. See Code for further requirement details.</p> <p>Test conducted by: _____</p> <p>Duct test result at 25 Pa: _____ Post construction or _____ Rough-in test</p> |
| | <p align="center">Temperature Controls Code Section R403.1, R403.1.1 and R403.1.2</p> | <p>At least one thermostat must be provided for each separate heating and cooling system. The thermostat controlling the primary system must be equipped with a programmable thermostat.</p> <p>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</p> |
| | <p align="center">Mechanical System Piping Insulation Code Section R403.4</p> | <p>Mechanical system piping capable of conveying fluids at temperatures above 105°F or below 55°F must be insulated to R-3.</p> |
| | <p align="center">Circulating Hot Water Systems Code Section R403.5.1.1 and R403.5.3</p> | <p>Controls for circulating hot water system pumps shall start 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.</p> <p>Circulating domestic hot water system piping shall be insulated to R-3.</p> |
| | <p align="center">Mechanical Ventilation Code Section R403.6</p> | <p>The building shall be provided with ventilation that meets the requirements of Section M1504 of the International Residential Code or the International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts must have automatic or gravity dampers that close when the ventilation system is not operating.</p> |
| | <p align="center">Equipment Sizing Code Section R403.7</p> | <p>Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. Equipment shall have an efficiency rating equal to or greater than applicable federal standards.</p> |
| | <p align="center">Certificate Code Section R401.3</p> | <p>A permanent certificate, completed by the builder or registered design professional, must be posted on a wall in the space where the furnace is located, in a utility room or on the electrical distribution panel. It must list the R-values of insulation installed in or on the ceiling, walls, foundation, slab and ducts outside the conditioned spaces; U-factors and SHGC for fenestration; results from any required duct system test and building envelope air leakage testing performed on the building. The certificate must also list the type and efficiency of heating, cooling and service water heating equipment.</p> |
| | <p align="center">Existing Buildings and Structures See Appendix J of IRC</p> | <p>The purpose of these provisions is to encourage continued use of existing buildings and structures. Work in existing buildings shall be classified into categories of repair, renovation, alteration and reconstruction. Consult this Appendix for specific requirements related to work in existing buildings.</p> |
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