Town of Northfield
BUILDING PERMIT APPLICATION

Permit #: _____
Issue Date:_____
Fee Paid: _____
Check #:_____

PROPERTY OWNER

Name _____

Address _____

Tel. #_____ Email address _____

APPLICANT INFORMATION Same as Owner _____ Yes _____ No

Name _____

Address _____

Tel. #_____ Email address _____

PROPERTY INFORMATION

911 address: _____

Tax Map and Lot Number: _____ Size: _____ acres

Is the property on a public road? ____ Yes ____ No. If not, how is it accessed?:

_____

Zoning District _____ R1 _____ R2 _____ Conservation _____ Commercial/Industrial

Driveway access permit number (if needed): _____

Is the property in the Groundwater Protection District? _____ Yes _____ No

Is any proposed work within 50 feet of a Wetland area? _____ Yes _____ No

Is any proposed work within a Flood Hazard Area? _____ Yes _____ No

PROJECT DESCRIPTION: *Please describe the work you want to do:*

_____

_____

_____

PROPOSED USE

What is the property used for now?

____Vacant ____Business

____Single Family Home ____Residence and Business

____Duplex ____Agricultural

____Multi Family Home Other _____

Are you proposing that the use of the property be changed?

No, we are not seeking to change the use of the property _____

Yes, if approved this construction will change the use of the property:

____ We want to build on vacant land ____ We want to add a new residence

____ We want to add a business use Other _____

CODE & PERMIT INFORMATION

Applicable Building Codes: **NH Building Code,**
National Electric Code 2005
NFPA 101 Life Safety Code

ELECTRICAL/PLUMBING: State law requires a master plumber and electrician for all work unless you own and live in the structure. Multifamily and rental housing requires master electrician and plumber for all work

Electrical Contractor **Separate Form Required** None: _____

Business Name: _____

Address: _____

Your Electrical Contractor is required to file an application form with the Town of Northfield for this project, applications are available at Town Hall or at www.northfieldnh.org A copy of your electrical contractor's approved application must be filed with your building permit application.

Plumbing Contractor **Separate Form Required** None: _____

Business Name: _____

Address: _____

Your plumbing contractor is required to file an application form with the Town of Northfield for this project, applications are available at Town Hall or at www.northfieldnh.org A copy of your plumbing contractor's approved application must be filed with your building permit application.

SEPTIC SYSTEM: Approvals must be obtained from the NH Dept. of Environmental Services. If you are adding bedrooms to your home you may have to enlarge your septic system if it was not built to accommodate the additional bedrooms.

Septic Design Approval #: _____ None: _____

SMOKE (HEAT) DETECTORS: Shall be installed in each bedroom, outside each separate sleeping area and on every level of the dwelling, including basements.

NH ENERGY CODE APPROVAL: **Separate Form Required** Required for all new homes and "Living Space Additions". Approval form (EC-1) can be obtained from the Northfield Building Inspector or directly from the Public Utilities Commission. https://www.puc.nh.gov/EnergyCodes/energypg.htm

NATURAL GAS/PROPANE CONTRACTOR **Separate Permit Required** None: _____

Business Name: _____

Address: _____

A permit from the Tilton Northfield Fire Department is required for gas or oil burners. ***A copy of your approved permit to install a gas/oil burner must be filed with your building permit application.***

OIL CONTRACTOR **Separate Permit Required** None: _____

Business Name: _____

Address: _____

A permit from the Tilton Northfield Fire Department is required for gas or oil burners. ***A copy of your approved permit to install a gas/oil burner must be filed with your building permit application.***

DRIVEWAY/ROAD ACCESS **Separate Permit Required**

Will you be building a new driveway or improving an existing driveway? ___ Yes ___ No

Separate permit required, applications available at Town Hall or at www.northfieldnh.org

A copy of your road access permit application must be filed with your building permit application.

Estimated cost of project: $_____

Estimated completion date:_____

SETBACKS

	Existing	*Proposed*
How far back is the construction from the **front** property line	_____ ft	_____ ft
How far back is the construction from the **rear** property line	_____ ft	_____ ft
How far back is the construction from the **side** property line	_____ ft	_____ ft
How far back is the construction from the **side** property line	_____ ft	_____ ft

The footprint of my existing buildings will not change, nor am I adding a new building. _____

Fees: See attached fee calculation sheet

SKETCH

If your proposal includes any new construction your application needs to include a sketch that shows the following:

a. Boundaries of your lot
b. Names of streets or roads abutting the property
c. Location of all buildings on the lot
d. Dimensions of existing and proposed structures
e. Distance between existing and proposed structures and property lines
f. Location of wetlands
g. Location of septic tank and leach field
h. Location of well or water supply

Before you sign your application:

- Have you answered all the questions?
- Does your sketch include all requested information?
- Do you have all necessary attachments? *(If Applicable)*

Plumbing Contractor Application
Electrical Contractor Application
Driveway Permit
Natural Gas/Propane/Oil Permit from TNFD
NH Energy Code EC1 Approved by PU
Fee Calculation Sheet

I request a permit for the project described in this application and grant town officials permission to access my property for inspection purposes related to this project. I understand that any misrepresentation in this application, intentional or not, will invalidate approval.

I am aware that my building permit will become void if work is not begun within six months and that work must progress in a speedy manner.

Applicant _____ Date _____
(Signature)
Land Owner: _____ Date _____
(Signature)

Office Use Only

Date Received: _____ Received by: _____

Amount paid: _____ Date paid: _____ Check No.: _____

Comments: _____

_____

_____

___ Approved as submitted ___ Denied Permit Number: _____

___ Approved with conditions: _____

_____

_____

Code Enforcement Officer:_____ Date: _____

TOWN OF NORTHFIELD

BUILDING PERMIT FEE CALCULATION SHEET

	Rate	Multiplier	Fee
Residential			
New Single Family Home	$300		$_____
New Multi Family Home	$350 for 1st unit,$200 for each add. Unit	x _____ Units =	$_____
Interior / Extierior Renovation	$25		$_____
Addition	$0.10/sq. ft., $25 minimum	x _____ Sq. Ft. =	$_____
New Accessory Structure	$0.15/sq. ft., $25 minimum	x _____ Sq. Ft. =	$_____
Plumbing	$25		$_____
Electrical	$25		$_____
Comm. /Industrial			
New Structure	$0.20/sq.ft.; $750 min	x _____ Sq. Ft. =	$_____
Addition	$0.20/sq.ft.; $300 min	x _____ Sq. Ft. =	$_____
New Accessory Structure	$0.20/sq.ft.; $300 min	x _____ Sq. Ft. =	$_____
Interior / Extierior Renovation	$0.20/sq.ft.; $300 min	x _____ Sq. Ft. =	$_____
Demolition	$25		$_____
Sign Permit	$25		$_____
TOTAL			$_____

* Fees Refundable at the discretion of the Board of Selectmen
* Alterations/Additions made during construction will be reviewed and may be subject to additional fees
* Fees are due when application is filed
* No permit and no fees for structures under 100 sq. ft.
* After the fact building permit fees doubled, $100 minimum

Office Use Only

Amount Received: $_____ Method of payment:

Date: _____ Check: ☐ Check No. _____

Received by: _____ Cash: ☐

Adopted by Northfield Selectboard on 1.29.18

Town of Northfield
ELECTRICAL PERMIT APPLICATION

Permit # _____
Issue Date: _____
Fee Paid: _____
Check #: _____

PROPERTY OWNER
Name _____ Tel. #_____
Address _____ Email _____

APPLICANT INFORMATION Same as Owner _____ Yes _____ No
Name _____ Tel. #_____
Address _____ Email _____

CONTRACTOR INFORMATION None – work done by owner _____
Name _____ Tel. #_____
Address _____ Email _____
License #: _____ Expiration Date: _____

PROPERTY INFORMATION
911 address: _____ Map and Lot #: _____
Type of Property: Commercial ____ Industrial _____ Single Family Home ____ Multi-family Home ____
Other _____

PROJECT DESCRIPTION: *Please describe the work you want to do:*

_____

_____

Type of Construction: New _____ Remodel ____ Addition _____ Alteration _____
Type of Service: 120/240 Single Phase ____ 120/208 Three Phase ____ Other: _____
Service Size: 100 Amp _____ 200 Amp _____ Other: _____
Number of Circuits: _____

Please be advised that service approval for the utility is provided by Tilton/Northfield Fire District

I agree that all work will comply with local and state codes as adopted and in accordance with any plans that have been submitted. I certify I request a permit for the project described in this application and grant town officials permission to access my property for inspection purposes related to this project. I understand that any misrepresentation in this application, intentional or not, will invalidate approval.

Applicant _____ Date _____
(Signature)
Applicant Printed Name: _____

Application Fee $25.00

OFFICE USE ONLY

Date Received: _____ Received by: _____

___ Approved as submitted ___ Denied

Approved with Conditions _____

Code Enforcement Officer: _____ Date: _____

Town of Northfield
PLUMBING PERMIT APPLICATION

Permit # _____
Issue Date: _____
Fee Paid: _____
Check #: _____

PROPERTY OWNER
Name _____ Tel. #_____
Address _____ Email _____

APPLICANT INFORMATION Same as Owner _____ Yes _____ No
Name _____ Tel. #_____
Address _____ Email _____

CONTRACTOR INFORMATION None – work done by owner _____
Name _____ Tel. #_____
Address _____ Email _____
License #: _____ Expiration Date: _____

PROPERTY INFORMATION
911 address: _____ Map and Lot #: _____
Type of Property: Commercial ____ Industrial _____ Single Family Home ____ Multi-family Home ____
Other _____

PROJECT DESCRIPTION: *Please describe the work you want to do:*

_____

_____

Type of Construction: New _____ Remodel ____ Addition _____ Alteration _____
# of Bathrooms: Full Bath _____ Three Quarter Bath _____ Half Bath _____
Sewer Connection: Municipal _____ Community _____ Septic System _____

I agree that all work will comply with local and state codes as adopted and in accordance with any plans that have been submitted. I certify I request a permit for the project described in this application and grant town officials permission to access my property for inspection purposes related to this project. I understand that any misrepresentation in this application, intentional or not, will invalidate approval.

Applicant _____ Date _____
(Signature)
Applicant Printed Name: _____

Application Fee $25.00

OFFICE USE ONLY

Date Received: _____ Received by: _____

___ Approved as submitted ___ Denied

Approved with Conditions _____

Code Enforcement Officer: _____ Date: _____

Tilton-Northfield Fire & EMS

12 Center Street, Tilton, NH 03276

(603)286-4781 • fax (603)286-4787 • info@tnfd.org

APPLICATION FOR PERMIT TO INSTALL OR ALTER HEATING APPLIANCES AND/OR FUEL STORAGE TANKS

Application is hereby made in accordance with the provisions of NFPA 1, the Fire Prevention Code, adopted by the Tilton-Northfield Fire District and regulations made under authority thereof by the undersigned for a permit to install or alter, for the person or persons and at the location named herein, certain equipment for the keeping, storage, or use of flammable or combustible gas or liquid and solid fuels as described below. NFPA 31, 33, 33-A, 54, 58 and 211 are referenced.

Type of Fuel

- ☐ Oil / Kerosene
- ☐ LP
- ☐ NG
- ☐ Solid-Fuel

Name (owner or occupant) ____________________

Mailing Address: ____________________

Installation Site Address: ____________________

Contact Phone Number(s): ____________________

Contractor ____________________

Mailing Address: ____________________

Contact Phone Number(s): ____________________

SIGNATURE OF CONTRACTOR: X____________________ DATE: ____________

This application is made with full knowledge of the current regulations governing such installations, which will be made in compliance therewith. By affixing my signature to this permit application, I agree that all work done by myself or others under my supervision shall be completed in compliance to all applicable code(s), Tilton-Northfield Fire District Ordinances and the manufacturer's installation instructions

Appliance Manufacturer ____________________ [illegible] ____________________

Appliance Manufacturer ____________________ [illegible] ____________________

Appliance Manufacturer ____________________ [illegible] ____________________

Size and Location of tank(s) ( ) [illegible] ( ) [illegible] ____________________

Please check all that apply

[illegible]	[illegible]	[illegible] 60.00	(Includes Interior & Exterior Piping & Appliance)
Additional Appliance	[illegible]	[illegible] 30.00	
Interior Piping Only	[illegible]	[illegible] 20.00	
Tank & Exterior Piping	[illegible]	[illegible] 30.00	

This application is not a permit to operate. The installer must contact the Fire Prevention Office when the installation is complete to schedule an inspection.

Office Use Only

Issued By: ____________ Date Received: ____________ Fee: $________ CHECK #________

[illegible] Heating Appliance [illegible]

Inspection Date____________Time ________Tag #________ Approved______ Not Approved_____

License Endorsements:

GPI	Gas Piping Installer – holder may do gas piping only
EI – P/N	Equipment Installer – Holder can install piping and equipment
ST – P/N	Service Technician – Holder can install piping and equipment and service existing equipment
HST	Holder works only on hearth type systems

GAS DISTRIBUTION DIAGRAM

Appliances Served	BTU's	Fuel Type	Pipe Size
1._____	_____	_____	_____
2._____	_____	_____	_____
3._____	_____	_____	_____
4._____	_____	_____	_____
5._____	_____	_____	_____
6._____	_____	_____	_____

Piping System Diagram: **(show all pipe sizes, lengths and types, including bonding connection for CSST.)**

Test pressure shall be measured with a manometer or with a pressure measuring device designed and calibrated to read record or indicate a pressure loss due to leakage during the pressure test period. OXYGEN SHALL NEVER BE USED.

Tilton-Northfield Fire & EMS

12 Center Street, Tilton, NH 03276

(603)286-4781 • fax (603)286-4787 • info@tnfd.org

APPLICATION FOR PERMIT

A fee in accordance with the following schedule shall be paid to the Tilton-Northfield Fire District at the time of application: (1) an INSTALLATION or REMOVAL and/or ALTERATION PERMIT, (2) an ACTIVITY PERMIT, (3) any OTHER SERVICE, (4) HAZARDOUS MATERIALS STORAGE, and (5) any RECORDS, PHOTOGRAPHS or DOCUMENTS. Such fee shall not be refunded upon failure of an applicant to receive the permit. Failure to apply for necessary permits or required service can result in an order from the Chief or his/her designee to obtain a permit or service. Such an order shall be considered as application made for the necessary permit or service. Fees are payable upon permit application. Failure to pay for permit fees imposed by this fee schedule, within the time period specified, shall render such permit null and void. Exception: These permit fees shall not apply to activities of nonprofit corporations or civic or fraternal organizations that possess proof of an Internal Revenue Service tax exempt status. However, other charges may be assessed under special circumstances.

Type of Permit:

☐ Fire Alarm System ☐ Sprinkler System ☐ Place of Assembly ☐ Other _____

Name: _____

Organization/Business Name: _____

Mailing Address: _____

Site Address: _____

Phone Number(s): _____

Certification / License Number: _____

Installed by: _____

Address / Phone # _____

Signature of Applicant: _____ Date: _____

Office Use Only

Issued By: _____

Date: _____

Fee: $ _____ CK # _____

This application is not a permit to operate. The installer must contact the Fire Prevention Office Monday – Friday when the installation is complete to schedule an inspection.

Tilton-Northfield Fire & EMS

Fee Schedule for Permit to Install, Remove, Store, or Alter

Permits	Fees
Oil and Gas fueled heating – Complete System including tank, all piping and appliance.	$60.00
Gas/Oil burning Appliance Only	$30.00 Per Appliance
Gas Piping Only	$20.00
Gas/Oil Tank with exterior piping	$30.00 Per Tank
Solid Fuel Heating Appliance	$30.00 Per Appliance
Flame Effects	$50.00
Fire Alarm System – 2 Inspections (rough & final)	$100.00/ 0 – 10,000 Square Feet $200.00/ 10,001 + Square Feet
Fire Alarm System Modification	$50.00
Sprinkler System – 3 Inspections (supply, rough, final flow)	$100.00/ 0 - 200 Sprinkler Heads $200.00/ 201 + Sprinkler Heads
Sprinkler System Modification	$50.00
Fireworks	$1,000.00
Commercial Hood System	$100.00
Spraying or Dipping of Flammable Finish Booths	$100.00

Re-Inspection Fee

A re-inspection fee will be assessed for all failed inspections.

$25.00 – First follow-up inspection

$50.00 – Second Follow-up inspection

$100.00 – Third and each subsequent follow-up inspection

This list is of the most common permits; for a complete list, please contact us.

New Hampshire
Residential Energy Code Application
for Certification of Compliance for New Construction, Additions and/or Renovations
(EC-1 Form)
Minimum Provisions

Effective Date: April 1, 2010

Owner/Owner Builder: 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 #: Lot #:

Street:

Town/City: County:

Type of Construction:

○ **Residential** ○ **Small Commercial**

○ New Building ○ Renovation ○ Addition

○ Thermally Isolated Sunroom

○ 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.

Zone 5 ○ Cheshire, Hillsborough, Rockingham or Strafford **except the town of Durham that uses 2012 IECC**

Zone 6 ○ All other counties **and the town of Durham**

Total New Conditioned* Floor Area:

_____ ft^2

Heating System: (if new system is being installed)

Annual Fuel Use Efficiency (AFUE): _____ %

Fuel Type(s): ☐ Oil ☐ Natural Gas ☐ Propane (LP)
☐ Electric ☐ Wood ☐ Other _____

Heating System Type: ☐ Hot Water ☐ Hot Air
☐ Stove ☐ Resistance ☐ Heat Pump ☐ Geothermal

Basement or Crawl Space: (*a conditioned space is one being heated or cooled, containing un-insulated ducts or with a fixed opening into a conditioned space. Walls must be insulated)

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/ ft^2)

Form Submitted by:

☐ Owner ☐ Builder ☐ Designer ☐ Other _____
Architects must certify plans meet code; no form required

(revised 10/30/13)

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 Public Utilities Commission and with the New Hampshire Code for Energy Conservation in New Building Construction.

Signature_____ **Print Name**_____ **Date**_____

Official Use Only

Date Complete Application Received: **Approved by:** **Date:**

Approval Number:

Stamp:

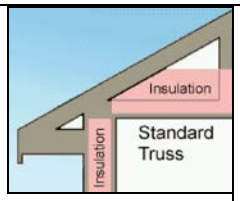
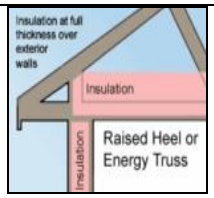
Reason: ☐ 1 ☐ 2 ☐ 3 ☐ Other:_____
Notice: ☐ e-mail ☐ vm Date:_____

New Hampshire Energy Code EC-1

Certification No.:

Directions: Complete the "Your Proposed Structure" columns. No measurements or calculations are needed. If you at least meet the New Hampshire 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 cannot meet these requirements, consider downloading REScheck from http://www.energycodes.gov/rescheck/download.stm and use trade-offs to prove compliance. **Submit pages 1 and 2 only.**

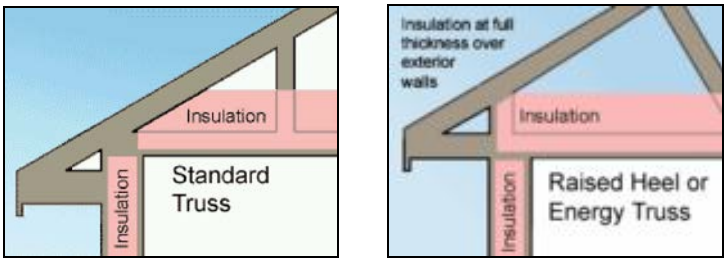
You are encouraged to build with higher R-values and lower U-values than you report here. The "Required R or U Values" are the worst permitted in NH.

Building Section	Required R or U Values	YOUR PROPOSED STRUCTURE: Write Planned R and U Values	YOUR PROPOSED STRUCTURE: Brands / Models / insulation type and thickness (if known)
Window U Factor (lower U is better)	**U .35** (maximum) **U-.32** (if log walls in Zone 5) **U-.30** (if log walls in Zone 6) **U .50** (Thermally Isolated Sunrooms only)	Write in U-Value	Check if ☐ **Sunroom** ☐ **Log Walls**
Skylights	**U .60**		
Flat Ceiling[i] *or* **Flat Ceiling with Raised or Energy Trusses R-value**	 **R-38** (Zone 5) **R-49** (Zone 6) if using the above construction technique **R-49** if log walls	 **R-30** (Zone 5) **R-38** (Zone 6) if maintaining the full R value over the plates **R-49** if log walls	Write in R-Value → If using only R-30 in Zone 5 or R-38 in Zone 6 you must check this box	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-30 (Zone 5) or R-38 (Zone 6), you must certify that you'll maintain R-38 over the plates by checking the box below.** ☐ ***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.***
Sloped or Cathedral Ceiling	**R-30** (Zone 5 & 6) or **38** if more than 500 ft sq or 20% of total ceiling area (Zone 6) **R-24** (Thermally Isolated Sunrooms only)	Write in R-Value	Check if ☐ **Sunroom**
Above Grade Wall[ii] **R-value**	**R-20** Cavity Insulation only *or* **R-13** *plus* **R-5** Cavity *plus* Continuous Insulation **R-13** (Thermally Isolated Sunrooms only)	Write in R-Value	Log homes must comply with ICC400-2012, 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 ☐ **Sunroom** ☐ **Log Walls**
Door U-Value	**U .35** (maximum)	Write in U-Value	
Floor R Value (Basement ceiling)	**R-30** *or* Insulation sufficient to fill joist cavity	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**
Basement or Crawl Space Wall R Value	**R-13** Cavity Insulation or **R-10** Continuous Insulation (Zone 5) **R-19** Cavity Insulation or **R-15** Continuous Insulation (Zone 6)	Write in R-Value	
Slab Edge[iii] **R Value**	**R-10** **2'** (Zone 5) **4'** (Zone 6) (see drawing pg 3) ***add*** **R-5** if the Slab is heated or **R-15** under entire heated slab if a log home.	Write in R-Value	Check if ☐ **Heated Slab**
Air Sealing	**Planned Air Sealing Test Method** There are two approaches to demonstrating compliance with air sealing requirements.	☐ Blower Door ☐ Visual Inspect	The visual inspection certification must be consistent with the requirements of Table 402.4.2 (page 4) and the method of compliance planned and approved by the local jurisdiction

Submit pages 1 and 2 to: **NH Public Utilities Commission, 21 South Fruit Street STE 10, Concord NH 03301**
Fax: 603.271.3878 E-mail: energycodes@puc.nh.gov

Footnotes to Residential Energy Code Application for Certification of Compliance

[i] Ceilings with attic spaces: R-30 in Zone 5 or R-38 in Zone 6 will be deemed to satisfy the requirement for R-38 or R-49 respectively wherever the full height of uncompressed R-30 or 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.

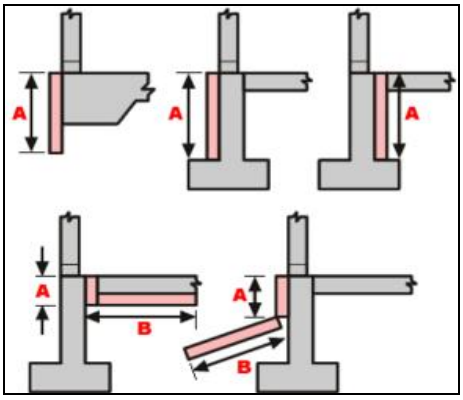


[ii] R-13 + R-5 means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where the structural sheathing is placed. If structural sheathing covers more than 25 percent of exterior, the structural sheathing 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 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 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.

AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Required Elements Check List (see page 2 AIR SEALING) IECC Code section 402.4.2

This page must be provided to the building inspector at final inspection.

√ **Check here** Certification No.:

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

NEW HAMPSHIRE ENERGY CODE

Summary of Basic Requirements See IECC 2009 Code Book for complete details

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

√ Check here **Certification No.:**

	Air Leakage Code section 402.4 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 402.4.2	Building envelope air tightness and insulation installation shall be demonstrated to comply with requirements by Blower Door testing to less than **7** air changes/hr at 50 Pa or a visual inspection per page 4 of this document. The local Building Official may require an independent 3rd party to conduct the visual inspection. See page 4.
	Testing Option Code Section 402.4.2.1 **or** **Visual Option** Code Section 402.4.2.1	While the Blower Door Test and/or Visual Option are methods of demonstrating compliance many of the general requirements as defined by this checklist (pages 5 & 6) must still be met. Blower Door Test conducted by: _____ Result (at 50 Pa): _____CFM Interior Volume_____ CF _____ACH **or** Structure passes Visual Inspection: _____signed _____ date
	Fireplaces Code Section 402.4.3	New wood-burning fireplaces shall have gasketed doors and outdoor combustion air.
	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	A minimum of 50% of the lamps in permanently installed lighting fixtures shall be 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.
	Pull-Down Attic Stairs, Attic Hatch, and Knee Wall Doors Code section 402.2.3	Should be insulated to a level equal to the surrounding surfaces and tightly sealed and weather-stripped at the opening.

	Full size Attic or Basement 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.
	Duct Insulation Code section 403.2	**Supply** ducts in attics must be insulated to at least R-8. All other ducts must be insulated to at least R-6. Exception: Ducts or portions thereof located completely inside the building thermal envelope.
	Duct Construction Code sections 403.2.2 &.3	Ducts, air handlers, filter boxes, and building cavities used as ducts must be sealed. Joints and seams must comply with Section M1601.4.1 of the *International Residential Code*. Building framing cavities must not be used as supply ducts.
	Duct Testing Code sections 403.2.2 &.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 or _____Rough-in test
	Temperature Controls Code section 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
	Mechanical System Piping Insulation Code section 403.3	Mechanical system piping capable of conveying fluids at temperatures above 105°F or below 55°F must be insulated to R-3.
	Circulating Hot Water Systems Code section 403.4 & NH amendments	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.
	Mechanical Ventilation Code section 403.5	Outdoor air intakes and exhausts must have automatic or gravity dampers that close when the ventilation system is not operating.
	Equipment Sizing Code section 403.6	Heating and cooling equipment must be sized in accordance with Section M1401.3 of the *International Residential Code*.
	Certificate Code 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.

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