



Town of Northfield BUILDING PERMIT APPLICATION

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

COMMERCIAL

PROPERTY OWNER(S)

Name: _____
Address: _____
Tel.#: _____ Email: _____

APPLICATION INFORMATION

Same as Owner ☐ Yes ☐ No

Name: _____
Address: _____
Tel.#: _____ Email: _____

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 ☐ Residence and Business
☐ Duplex ☐ Agricultural ☐ Multi Family ☐ 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 business use

Have you been approved by the Planning Board for Site Plan? ☐ Yes; Date _____ ☐ No ☐ N/A

CODE & PERMIT INFORMATION

Applicable Building Codes adopted by the State of NH:

IBC Building Code as adopted by the State of NH
National Electric Code
International Plumbing Code
NFPA 101 Life Safety Code

➤ **BUILDING CONTRACTOR:**

Business Name: _____

Address: _____

- **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: _____

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: _____

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.

- **NATURAL GAS/PROPANE CONTRACTOR** **Separate Permit Required**

None: _____

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: _____

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

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

Estimated completion date: _____

How far back is the construction from the **front** property line

How far back is the construction from the **rear** property line

How far back is the construction from the **side** property line

How far back is the construction from the **side** property line

Proposed

_____	ft	_____	ft
_____	ft	_____	ft
_____	ft	_____	ft
_____	ft	_____	ft

SKETCH

- 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

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.



■ 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*
 - Septic Plan from State of NH*
 - Driveway Permit*
 - Natural Gas/Propane/Oil Permit from TNFD*
- Have you included the Building Design Plans stamped by a NH Registered Design Professional?

I request a permit for the project described in this application and grant town official's 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 expire if work has not begun within six months or if construction activity ceases. I agree to follow building code requirements and the town ordinance and regulations.

Applicant Signature: _____ Date _____

Land Owner Signature: _____ Date _____

Application Fees:

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 / Exterior Renovation	\$0.20/sq.ft.; \$300 min	x	_____	Sq. Ft.

- Alteration/Additions made during construction will be reviewed and may be subject to additional fees.
- Fees are due when application is filed
- After the fact building permit fees double

Office Use Only

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

Comments: _____

___ Approved as submitted ___ Denied Permit Number: _____

___ Approved with conditions: _____

Code Enforcement Officer: _____ Date: _____

Inspections:

Date: _____ What was inspected: _____

Notes: _____

Date: _____ What was inspected: _____

Notes: _____

Date: _____ What was inspected: _____

Notes: _____

Final Inspection Date: _____ Occupancy Permit Issued Date: _____

**Town of Northfield
Energy Code Application**

for Certification of Compliance for New Construction, Additions and/or Renovations

PROPERTY OWNER

Name: _____

Mailing Address: _____

Tel. # _____

Email: _____

BUILDER

Name _____

Mailing Address: _____

Tel. # _____

Email: _____

GENERAL CONTRACTOR

Name _____

Mailing Address: _____

Tel. # _____

Email: _____

PROPERTY INFORMATION

911 address: _____

Tax Map and Lot Number: _____

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

Structure is EXEMPT because:

☐ Mobile Home ☐ On an historic register
☐ Low energy use (less than 1 watt/ ft²)

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.

Total New Conditioned * Floor Area:

_____ ft²

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 _____

Form Submitted by:

☐ Owner ☐ Builder ☐ Designer ☐ Other _____

Architects must certify plans meet code; no form required

OFFICE USE ONLY

Date Complete Application Received: _____

Approved by: _____

Date: _____

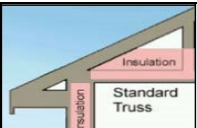
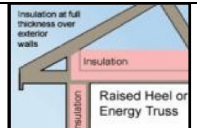
Approval Number: _____

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 Northfield Building Inspector.

Signature: _____ Print Name: _____ Date: _____

Directions: Complete the “Your Proposed Structure” columns. No measurements or calculations are needed. If you at least meet the NH 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.

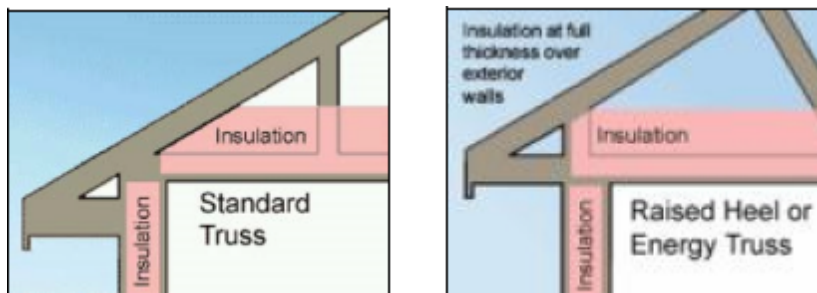
You are encouraged to build with higher R-values and lower U-values than you report here. The “Required R or U Values” are the worst permitted in NH.

Building Section	Required R or U Values	YOUR PROPOSED STRUCTURE	
		Write Planned R and U Values	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 <input type="checkbox"/> Sunroom <input type="checkbox"/> Log Walls
Skylights	U .60		
Flat Ceiling ⁱ or Flat Ceiling with raised or energy trusses R-Value	  <div> <p>R-38 (Zone 5) R-49 (Zone 6) If using the above construction technique R-49 if log walls</p> <p>R-30 (Zone 5) R-38 (Zone 6) If maintaining the full R value over the plates R-49 if log walls</p> </div>	Write in R-Value If using only R-30 (Zone 5) or R-38 (Zone 6) you must check this box →	<p>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.</p> <p><input type="checkbox"/> 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.</p>
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 Sunroom only)	Write in R-Value	Check if <input type="checkbox"/> 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)		
Door U-Value	U .35 (maximum)	Write in U-Value	
Floor R Value (Basement ceiling)	R-19 or Insulation sufficient to fill joist cavity	Write in R-Value	
Basement or Crawl Space Wall R Value	R-13 Cavity Insulation or R-10 Continuous Insulations (Zone 5) R-19 Cavity Insulation or R-15 Continuous Insulation (Zone 6)	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
Slab Edge ⁱⁱⁱ R Value	R-10 2' (Zone 5) 4' (Zone 6) (See drawing page 3) And R-5 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	Planned Air Sealing Test Method There are two approaches to demonstrating compliance with air sealing requirements.	<input type="checkbox"/> Blower Door <input type="checkbox"/> 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: Attn: Building Inspector Town of Northfield, 21 Summer Street Northfield NH 03276

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.

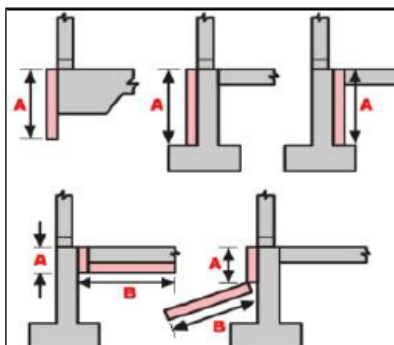


ⁱⁱ R-13 + R-5 means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where the structural sheathing is placed. If structural sheathing covers more than 25 percent of exterior, the structural sheathing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

	<p>Air Leakage Code section 402.4</p> <p>The building thermal envelope must be durably sealed to limit infiltration</p>	<p>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.</p>
	<p>Air Sealing and Insulation Code Section 402.4.2</p>	<p>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. <u>See page 4.</u></p>
	<p>Testing Option Code Section 402.4.2.1</p> <p>or</p> <p>Visual Option Code Section 402.4.2.1</p>	<p>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.</p> <p>Blower Door Test conducted by: _____</p> <p>Result (at 50 Pa): _____ CFM Interior Volume _____ CF _____ ACH</p> <p style="text-align: center;">or</p>
		<p>Structure passes Visual Inspection: _____ signed _____ date _____</p>
	<p>Fireplaces Code Section 402.4.3</p>	<p>New wood-burning fireplaces shall have gasketed doors and outdoor combustion air.</p>
	<p>Recessed Lighting Code Section 402.4.5</p>	<p>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.</p>
	<p>Electrical Power and Lighting Systems Code section 404</p>	<p>A minimum of 50% of the lamps in permanently installed lighting fixtures shall be high efficacy lamps.</p>
	<p>High-Efficacy Lamps Code section 202</p>	<p>Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of:</p> <ol style="list-style-type: none"> 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.
	<p>Materials and Insulation Information Code section 102.1</p>	<p>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.</p>
	<p>Pull-Down Attic Stairs, Attic Hatch, and Knee Wall Doors Code section 402.2.3</p>	<p>Should be insulated to a level equal to the surrounding surfaces and tightly sealed and weather-stripped at the opening.</p>

	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 <i>International Residential Code</i> . 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 <i>International Residential Code</i> .
	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.

NEW HAMPSHIRE ENERGY CODE Summary of Basic Requirements Page 2

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