



# **MERRIMACK FIRE DEPARTMENT**

432 Daniel Webster Highway  
Merrimack New Hampshire 03054  
603-420-1730

**Building Official**  
Richard C. Jones

**Building Inspector**  
Peter Manzelli II

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## **BUILDING DIVISION**

### **BUILDING INSPECTION CHECK-OFF RESIDENTIAL**

This is a typical sample list of what will be observed and inspected, during a typical field inspection of a residential construction project for minimum code compliance.

#### **FOUNDATION**

#### **CODE REFERENCE:**

##### **IRC**

<input type="checkbox"/> FOOTINGS - PROPER DEPTH OF 42" BELOW FROST LINE	R403.1.4
<input type="checkbox"/> MONOLITHIC SLAB - PROPER DESIGN FOR FROST PROTECTION	R403.3 Table 403.3(1)
<input type="checkbox"/> SOILS – PROPER LOAD BEARING (min 2,500 psf)	TABLE R401.4.1
<input type="checkbox"/> MINIMUM WIDTH OF FTG (2 x wall)	TABLE R403.1
<input type="checkbox"/> REINFORCING WALLS	TABLE R404.1.2
<input type="checkbox"/> FOOTING DRAINS	R403.3.3
<input type="checkbox"/> FOUNDATION WALL – ANCHOR BOLTS PROPERLY SPACED	R403.1.6
<input type="checkbox"/> BULKHEAD – SECOND MEANS OF EGRESS	R310.3
<input type="checkbox"/> NATURAL VENTILATION/ LIGHTING	R303.1
<input type="checkbox"/> DAMPROOFING / DRAINAGE	R403.3.3
<input type="checkbox"/> INTERIOR FOOTINGS	R1805.2
<input type="checkbox"/> CRAWL SPACE – VENTILATION (When required)	R408.1

#### **ROUGH'S**

#### **FRAME**

<input type="checkbox"/> STUD GRADE # 2 OR BETTER	R602.1
<input type="checkbox"/> BEARING WALLS – PROPER LOAD DISTRIBUTION	R602.3
<input type="checkbox"/> POINT LOADS	R602.4
<input type="checkbox"/> FLOOR JOISTS – PROPER SPAN LENGTH	TABLE R502.3.1(1)
<input type="checkbox"/> GIRDERS	TABLE R502.5(1)
<input type="checkbox"/> BEAMS	TABLE R502.5(2)
<input type="checkbox"/> HEADERS	R602.7
<input type="checkbox"/> CEILING JOISTS	TABLE R802.4(1)
<input type="checkbox"/> STAIR STRINGERS	R502.10
<input type="checkbox"/> HEADROOM	R305.1
<input type="checkbox"/> TREADS & RISERS	R311.7.4
<input type="checkbox"/> EGRESS WINDOWS – 5.7 sf/2 <sup>nd</sup> – 5.0 sf/1 <sup>st</sup> (821 si)	R310
<input type="checkbox"/> BLOCKING – GAURDS & RAILS	R311.7.7
<input type="checkbox"/> ROOF RAFTERS – COLLAR TIES	R802.2
<input type="checkbox"/> NAILING/ FASTENERS	TABLE 602.3(1)
<input type="checkbox"/> DRILLING & NOTCHINGS	FIG. R502.8
<input type="checkbox"/> FIREBLOCKING/ FIRESTOPS	R302.4.1.2
<input type="checkbox"/> DRAFT STOPPING	R302.12
<input type="checkbox"/> ROOF & WALL SHEATHING	R602
<input type="checkbox"/> ROOF VENTILATION/ RIDGE VENTS	R905
<input type="checkbox"/> ROOF PENETRATIONS	R903.2

## INSULATION

- ❑ WALLS - R-21
- ❑ CEILINGS (FLAT) - R-38
- ❑ CEILINGS (CATHEDRAL) - R-30
- ❑ FLOORS - UNHEATED BELOW - R-19
- ❑ WALLS - BASEMENT/ UNHEATED ROOM - R-13
- ❑ DUCTS & HW PIPING - R-6

## ELECTRICAL

- ❑ WIRING METHODS
- ❑ ELECTRICAL CONNECTIONS
- ❑ KITCHEN APPLIANCE CIRCUIT – MIN (2) – 20A
- ❑ LAUNDRY APPLIANCE CIRCUIT – MIN (1) – 20A
- ❑ BATHROOM CIRCUIT – 20A
- ❑ ARC- FAULT BRANCH CIRCUITS
- ❑ GFCI PROTECTION
  - ❑ ISLAND OR PENNINCILA - 20A
- ❑ DWELLING UNIT RECEPTICLES
  - ❑ WR/TP DAMP LOCATIONS
  - ❑ WP/TP WET LOCATIONS
- ❑ CARBON MONOXIDE DETECTORS
- ❑ SMOKE DETECTORS –
- ❑ CONDUCTOR SPACE IN WORK BOXES
- ❑ RECEPTICLE SPACING – 6'-0" & 12'-0" @ WALLS
- ❑ 3 WAY SWITCH STAIR LIGHTING
- ❑ CABLE SUPPORTS/ STAPLES
- ❑ MOUNTING SCREWS/ NAILS
- ❑ STEEL PLATES < 1 ¼ "
- ❑ FIXTURE LOCATIONS
- ❑ LUMINAIR LOCATIONS
- ❑ CLOSET SPACE
- ❑ RATED CEILING FAN BOXES
  - ❑ CEILING – SUSPENDED (Paddle Fan)
- ❑ I.C. RATING FOR CEILING FIXTURES
- ❑ CLOTHES DRYERS #10-3 AWG

## ELECTRICAL SERVICE

- ❑ PSNH WORK ORDER # \_\_\_\_\_
- ❑ SERVICE ENTRANCE – Overhead clearances
- ❑ SERVICE DROP - MAST – (When PSNH requires)
- ❑ GROUNDING ELECTRODES - @ FTGS/ FND Rebar
  - ❑ COMMON BONDING – Bldg Steel/ Separate Derived Systems
- ❑ SECONDARY GROUNDING – 2 - 8'-0" ½" rod @ 6'-0" / #6 AWG
- ❑ SERVICE LATERAL - SIZE & RATING
  - ❑ MINIMUM CONDUCTOR SIZE
  - ❑ SERVICE ENTRANCE CONDUCTORS
- ❑ DISCONNECTING MEANS
- ❑ AVAILABLE FAULT CURRENT – FUSES
- ❑ EXPANSION FITTING @ RISER
- ❑ MINIMUM FROST PROTECTION
- ❑ DIRECT BURIAL
  - ❑ SPLICING
- ❑ PROTECTION FROM DAMAGE

## MAIN SERVICE PANEL

## IECC

## NFPA-70

110.8  
110.14  
210.11(C)(1)  
210.11(C)(2)  
210.11(C)(3)  
210.12  
210.8(A)  
210.8(A)(6)  
210.52  
406.6 & 406.11  
406.8 & 406.11  
IRC R315.2  
IRC R314.2  
314.16  
210.52(2)  
210.70(A)(1)  
300.11  
314.23  
300.4  
210.50  
410.10  
410.2  
314.27(D)  
422.18 & 410.23  
410.116(2)  
220.54

## NEC-70 2017

IRC

IRC

## NFPA-70

230.24  
230.24(B)  
250.50 & 250.52  
250.30(A)  
250.53(G)  
230.31  
230.31(8)  
230.202(A)  
230.70  
230.90  
352.44  
TABLE 300.5  
300.6(3)  
300.5(E)  
300.5(D)

## NFPA 70

❑ LOCATION – WORKING SPACE	110.26
❑ CLEARANCES – 30” MIN @ 36” IN FRONT	110.26(A)1 & 2
❑ BONDING – H2O & GAS PIPING	250.104(B)
❑ SUB PANELS – ISOLATE NEUTRAL 4 WIRE	
❑ PROPER LIGHTING @ PANEL	110.26(D)
❑ LABELING OF CURCUITS	408.4
❑ AVAILABLE GUTTER SPACE	312.11
❑ PROPER TERMINATION GROUNDED CONDUCTORS	200.3
❑ LISTED BREAKERS/ RATED DISCONNECT	225.39

## **PLUMBING**

❑ MAIN STACK VENT	910.3
❑ WET VENTING	909.1
❑ FIXTURE VENTS	TABLE 906.1
❑ COMBINATION DRAIN & VENT SYSTEM	TABLE 912.3
❑ DEVELOPED LENGTH	TABLE 916.1
❑ HANGERS	TABLE 308.5
❑ RISER CLAMPS	TABLE 308.5
❑ STEEL PLATES < 1 ¼ “	305.8
❑ FIXTURE UNITS / TRAPS	TABLE 709.1
❑ LENGTH OF TRAP TO VENT	TABLE 906.1
❑ WET VENTING	909.1
❑ WET VENT SIZE	TABLE 909.3
❑ SANITARY DRAINAGE – MATEREIAL	702
❑ ABOVE GRADE	TABLE 702.1
❑ UNDERGROUND	TABLE 702.2
❑ SEWER	TABLE 702.3
❑ FITTINGS	TABLE 702.4
❑ ISLAND VENTING	913
❑ AIR ADMITTENCE VENT – (Where applicable)	917.1
❑ CLEANOUTS – Min 18”	708.8
❑ BASE STACK – Accessible	708.3.4
❑ INDIRECT WASTE	802.1
❑ WATER SUPPLY & DISTRIBUTION	604
❑ POTABLE WATER	602.2
❑ HOT WATER – MAX 130*     NH Amendment	501.6
❑ WATER PIPE & SEWER SEPERATION – 5’-0”	603.2
❑ DESIGN - FLOW RATE & PRESSURE	TABLE 604.3
❑ MAX - FIXTURE FITTINGS	TABLE 604.4
❑ PIPE – MIN SIZE	TABLE 604.5
❑ MANIFOLD SIZES	TABLE 604.10
❑ MATERIAL – STANDARDS	TABLE 605.3
❑ BUILDING WATER SUPPLY – Full Open valve	606.1.
❑ SHUT OFF VALVES	606.2
❑ BACKFLOW PROTECTION	608.13
❑ Backflow Preventers – Devise Applications	TABLE 608.1
❑ LOCATION – Protection from freezing	608.14
❑ CROSS-CONNECTION CONTROLS	608.16
❑ EQUIPMENT GRND – SUBMERSIBLE WELL PUMP/ CASING	NEC 250.112(M)
❑ SILL COCK – Hose Connected outlets	424.6
❑ ANTI-SYPHON VALVE/ BACKFLOW	608.15.4.2
❑ SYSTEM TESTING – WATER OR AIR	107.2

## **HVAC SYSTEMS**

## **IPC**

## **IMC**

❑ GENERAL REQUIREMENTS	
❑ APPLIANCES – (UL LISTED& APPROVED)	301.4
❑ MANUFACTURES SPECS	301.6
❑ APPROVED USE FOR APPLIANCE	301.5.1
❑ PROPER INSTALATION	304.1
❑ CLEARENCES REDUCTION METHODS	TABLE 308.6
❑ CONFLICTS	304.2
❑ ACCESS – ATTIC UNITS	306.3
❑ VENTALATION	403
❑ EXHAUST SYSTEMS	502
❑ COMMERCIAL KITCHEN HOODS	507.2
❑ HEATING SYSTEMS – Warm Air	
❑ DUCT WORK	603
❑ INSULATION	604.3
❑ PLENUMS	602
❑ DAMPERS - Installations	607.2
❑ FIRE/ SMOKE DAMPERS	607.3
❑ FIRE PARTITIONS/ Penetrations	607.5.3
❑ COMBUSTION AIR	701
❑ AIR CONDITIONING UNIT	
❑ LABEL IDENTIFICATION	301.6
❑ ACCESS/ CLEARANCES	306.1
❑ REFRIGERANT LINES	1107.2
❑ MATERIAL TYPES	1107.5
❑ CONDENSATION	1107.4

## **HEATING SYSTEMS**

❑ HYDRONIC SYTEMS	
❑ PIPING MATERIALS	TABLE 1202.4
❑ INSTALLATION	1206
❑ EXPANSION TANK	1025.1.6
❑ PRESSURE RELIEF VALVES	1006
❑ VENTING	801.2
❑ CUMBUSTION AIR	701.0
❑ SPRINKLER HEAD	Manufacture's Specifications Town of Merrimack Ordinance
❑ FUEL LINE PROTECTION	1305.2
❑ EMERGENCY SWITCH	
❑ VENT CONNECTION	803

## **GAS PIPING**

## **NFPA 54**

❑ ENTRANCE LOCATION
❑ REGULATOR
❑ VENTING
❑ PIPE SIZING
❑ LISTED MATERIALS
❑ HANGERS
❑ DRIP LOOP
❑ IN-WALL PROTECTION
❑ SHUT OFF VALVES
❑ FLOOR & WALL TERMINATIONS
❑ BONDING to H2O PIPING

## **CHIMNEY**

## **IRC**

- ❑ MASONRY
  - ❑ 8" SOLID WALLS
  - ❑ FIRE BRICK
  - ❑ SMOKE CHAMBER – PARGED
  - ❑ CLEARANCES TO COMBUSTIBLES
  - ❑ FLUE SEPERATION WALL
  - ❑ FRESH AIR SUPPLY – EXTERNAL
    - ❑ Combustible Air
  - ❑ DAMPER
  - ❑ CLEAN OUTS
  - ❑ ROOF CLEARANCES
  - ❑ HEARTH EXTENSIONS
  - ❑ MANTLE – Combustible Clearances
- ❑ MANUFACTURED
  - ❑ UL LISTED & APPROVED
  - ❑ MAUFACTURES SPECIFICATIONS
  - ❑ VENT TERMINATION
    - ❑ HORIZONTAL – Direct Vent
    - ❑ VERTICLE – Roof Penetration
  - ❑ VENT PIPE LABEL
  - ❑ FIRESTOPS
  - ❑ CLEARANCES
  - ❑ DAMPER
- ❑ LP GAS INSERT
  - ❑ SHUT OFF VALVE
  - ❑ BLACK IRON PIPE
  - ❑ VENTILATION



# FINAL INSPECTION CHECK LIST

## TOWN OF MERRIMACK NEW HAMPSHIRE



ADDRESS \_\_\_\_\_ MAP/ LOT \_\_\_\_\_ DATE \_\_\_\_\_

<input type="checkbox"/> House # posted at driveway and on house (min 4") contrast colors
<input type="checkbox"/> Deck, Landings & Stairs - Max riser height 7 ¾" min tread 10"
<input type="checkbox"/> Handrails & guardrails min 36" height with 4" space max balusters
<input type="checkbox"/> Kitchen & bathroom floors finished with cleanable surface
<input type="checkbox"/> Kitchen Countertop – nonporous, cleanable surface
<input type="checkbox"/> Min 2 "GFCI" protected countertop appliance circuits, includes island
<input type="checkbox"/> Microwave circuit "GFCI" protected
<input type="checkbox"/> Dishwasher "GFCI" protected – cord and plug connection under sink
<input type="checkbox"/> Bathroom outlets "GFCI" protected
<input type="checkbox"/> Hot Water – Temperature at sink faucets – 120* F max
<input type="checkbox"/> All outlets in habitable space to be "AFCI" protected – check panel CB All AFCI circuit breakers to be tested – * To test - press test button on breaker (circuit should trip) to reset turn off completely then switch breaker on
<input type="checkbox"/> An Egress windows in each bedroom – Min 5.7 sf operable window
<input type="checkbox"/> Grade level windows min (5.0 sf) - bedrooms below grade require egress to grade level with (44") max opening height from fin floor
<input type="checkbox"/> All habitable rooms to have a switched outlet or light fixture
<input type="checkbox"/> At least (1) 3 - way switch at each stairway – top and bottom of stair
<input type="checkbox"/> All outlets in garage to "GFCI" protected including overhead door – Min (1) outlet per garage bay
<input type="checkbox"/> Gas furnace, HW heater and boiler – installed to manufacturer's instructions - all require ½ sheetrock or sprinkler head
<input type="checkbox"/> Smoke detector in each bedrooms, CO/ smoke detectors on each level – hard wired – battery backup and interconnected
<input type="checkbox"/> All circuits in electrical panels are to labeled and identified
<input type="checkbox"/> Hydro massage / Hot Tubs – "GFCI" protected – disconnect in site
<input type="checkbox"/> A/C condensers Disconnect at unit and service outlet within 25'
<input type="checkbox"/> Pools – In ground require 4'-0" fence enclosure & AG – 48" barrier
<input type="checkbox"/>

Inspector \_\_\_\_\_ Approved Yes No



# TOWN OF MERRIMACK

## Certificate of Occupancy/ Certificate of Unit Completion Check List BLD - FRM - 014



Property Owner: \_\_\_\_\_ Phone: \_\_\_\_\_

Job Location: \_\_\_\_\_ Tax Map/ Lot: \_\_\_\_\_

Applicant: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**A Certificate of Occupancy (CO) or Certificate of Unit Completion shall only be issued upon the completion of the following check list and signatures, of the applicable Town of Merrimack Departments, certifying that the property is in compliance with all Town adopted Codes, Regulations and Ordinances.**

### Authorized Department Signatures

Town Departments ( <i>Call to schedule appointments</i> )			Signature of		N/A
			Date approved	Authorizing Person	
Sanitary/ Sewer	Waste Water	883-8196			<input type="checkbox"/>
	36 Mast Road				
Water Department Village District	Merrimack Village District	424-7171			<input type="checkbox"/>
	2 Greens Pond Road				
PWD Highway Division	Merrimack Public Works	423-8551			<input type="checkbox"/>
	76 Turkey Hill Road				
Planning & Zoning	Community Development	424-3531			<input type="checkbox"/>
	6 Baboosic Lake Road				
Fire Department Building Division	Fire Sprinkler/Alarms	424-3690			<input type="checkbox"/>
	Building Department	420-1730			<input type="checkbox"/>
	Health Department	420-1730			<input type="checkbox"/>
	432 Daniel Webster Highway				

**Prior to the town granting a Certificate of Occupancy or Certificate of Unit Completion, the Applicant, General Contractor and or Property Owner is solely responsible for obtaining all applicable signatures and fulfilling all conditions of approvals, pertaining to the property, and to submit this completed form to the Building Department.**

#### Occupancy and Unit Certificate Conditions:

1. The construction has met all adopted State of New Hampshire Building Codes and local regulations.
2. Certificate of Unit Completion must receive final inspection, from the Fire Marshal prior to opening to the general public. All food service licensed uses require Final inspection from the Health Officer.
3. Development Conditions of Approval, Subdivisions, Planning and Zoning.
4. It is the responsibility of the Owner to collect and obtain ALL Approvals and Signatures listed above:

*I agree to comply with the provisions of the applicable Building Code, and the requirements of the Authority Having Jurisdiction. And that the information on this form is accurate and has been completed to the best of my knowledge.*

Applicant/ Owner \_\_\_\_\_

Date \_\_\_\_\_



# RESIDENTIAL CERTIFICATE OF OCCUPANCY INSPECTION REPORT



Inspection Date: _____	Time: _____	Contact: _____
Re-Inspection Date: _____	Time: _____	Contact: _____
Street Address: _____	Construction Type <input type="checkbox"/> New <input type="checkbox"/> Existing	Site Phone _____
Owners Name: _____		

## RESIDENTIAL CERTIFICATE OF OCCUPANCY CHECK LIST

Check Box if  
Complete

- 1 ☐ House Number attached to the structure minimum of 4 inches high in a contrasting color to the background. (NFPA 1 3-7.1)
- 2 ☐ Emergency Shut-off for all oil fired furnaces and heating systems.
- 3 ☐ Emergency Shut-off for gas, external to the building in an easily accessible area.
- 4 ☐ Smoke Detectors and/or CO Detectors **(110 Volts AC, Battery Back-up and Interconn**  
(NH State Fire Code, 1999ed. Sec. 6018.03)
- 5 ☐ All Detectors (Heat & Smoke) **Shall** be on the nearest electrical lighting circuit
- 6 ☐ Basement (Smoke Detector(s) / CO Detectors are Present and Tested)
- 7 ☐ First Floor (Smoke Detector(s) / CO Detectors are Present and Tested)
- 8 ☐ Second Floor (Smoke Detector(s) / CO Detectors are Present and Tested)
- 9 ☐ Each Bedroom (Smoke Detectors /CO detectors are Present and Tested)  
    ☐ Bedroom 1    ☐ Bedroom 2    ☐ Bedroom 3    ☐ Bedroom 4    ☐ Bedroom 5
- 10 ☐ Ceiling Protection over Furnaces, Boilers and Solid Fuel Burning Equipment

*"The area over all furnaces, boilers, and solid fuel burning equipment shall be fireproofed with no less than ½" drywall extended three feet beyond the unit, and any combustible wall within the perimeter of said fireproofed ceiling area shall be so fireproofed. All joints shall be sealed." **Alternative:** A 175° upright sprinkler head directly over the burner. Head may be piped off the domestic water system. If appliances are further than 5' apart each unit shall have separate protection.*

If there are any questions, concerns or comments with the inspection please list them below and refer them to the Fire Prevention Bureau.

**Comments:**

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Inspection Performed By: _____	ID # _____	Shift: _____
Re-Inspection Performed By: _____	ID # _____	Shift: _____

***Please complete the proper documentation with Community Development and return this form to the Fire Marshal's office. Thank-you***