

RESIDENTIAL

TOWN OF FALMOUTH BUILDING PERMIT APPLICATION

Permit Number _____

Map/Lot _____ Tax Sheet _____ Zone _____ Permit deposit _____

Date Received _____ Permit Fee _____

Location of Construction: _____ Final Cost _____

ATTACH ALL DOCUMENTS REQUIRED PER BUILDING PERMIT APPLICATION CHECKLIST

Property Owner Information

Contractor Information

Property owner: _____

Contractor: _____

Address: _____

Address: _____

Phone: _____ Cell Phone: _____

Phone: _____ Cell Phone: _____

Signature of Owner/Contractor: _____ Date: _____

Building Construction Information - circle one

New Single Family Residence ~ Garage ~ Addition ~ Remodeling ~ Dormer ~ Demolition ~ Shed ~ Sun Room ~ Deck

Other, Project Description: _____ Cost _____

Proposed Use _____ Past Use _____ Is Proposed Use Seasonal Yes ____ No ____

Stories _____ # Bedrooms _____ # Bathrooms _____ Building Height _____ Heat Type _____

Square Footage (by Building Inspector) Finished _____ Unfinished _____ Decks & Porches _____

Periodic Inspections are required. See the Inspection Schedule Form. Failure to schedule inspections and/or receive final approval by the Inspector will constitute *Occupancy without a Certificate*. Fines will be imposed at a rate not less than One Hundred Dollars (\$100.00) per day, nor more than Twenty-Five Hundred Dollars (\$2,500.00) per day.

(The following is to be signed when permit is picked up.)

On this date _____, I _____ have read the above and received the following documents:

- Building Permit Site Card *to be posted at the site (inspections will not be done if this is not posted).*
- Photo copy of Building Permit Application with conditions
- Inspection Schedule & Permit Requirements

Permit Conditions:

Signature of Code Enforcement Officer: _____ Date: _____

Plan Submittal Checklist
Information required for Residential Buildings, Additions and Decks
Codes Enforcement and Building Regulation

Complete plan sets drawn on the following paper size are required

- ❑ One set if drawn to the scale required below on 11”X17” or smaller paper or;
- ❑ One set drawn to the scale required below and a second set reduced to 11”X17” maximum paper size

Complete plan sets will contain the following information. Incomplete sets will not be accepted

- ❑ Site plan drawn to 1:50 scale or larger and containing the following
 - North arrow
 - Distance of all building setbacks measured perpendicular to property lines
 - Distance between buildings
 - Location of septic tank and leach field if applicable
 - Driveway location
 - Street names
 - Easements, rights of ways, water courses and areas restricted by covenant
 - Area of lot
 - Erosion and sediment control measures per “Typical BMP’s for House lots” handout
- ❑ Foundation, Floor and Roof plans drawn to 3/16” scale or larger and containing the following
 - Overall building dimensions
 - Room use (name) and size
 - Windows and doors including swings and sizes
 - Stairs showing direction of travel and dimensions
 - Plumbing fixtures, appliances and fireplace(s)
 - Direction and sizes of floor, ceiling, roof, beams and header structural members
 - A Maine licensed engineer approval is required for all structural steel, lvl’s, trusses, manufactured framing material ect. used in the building construction
 - Radon vent location; a 3” minimum gas tight pipe originating below the basement slab and extending a minimum of 12” through the roof
- ❑ Building Cross Section drawn to 1/4” scale or larger containing the following
 - Section through building showing foundation, floors, ceilings, wall and roof assemblies
 - Show and label all construction materials
 - Indicate floor to ceiling heights of rooms including basement and attic
 - Section through stairs showing headroom, treads and risers including dimensions
- ❑ Building Elevation plan drawn to 3/16” scale or larger and containing the following
 - Show each side of building
 - Exterior finish
 - Proposed grade at each corner of the building extended out to 20’
 - Dimension to the maximum height of the building from the average finished grade within 20’ of the building
- ❑ Energy Efficiency (*New buildings and Additions only*)
 - Demonstrate compliance with chapter 11 of the building code

Date complete plan set received _____

This date does not reflect a plan review, only that the set contains the plans required for a review)

Building Permit Application Checklist

New Buildings, Additions and Decks:

- ❑ Proof of ownership of legal lot (recorded deed or proposed deed with purchase & sale agreement)
- ❑ Required information on Plan Submittal Checklist
- ❑ Completed building permit with map and lot (fee is determined by the building inspector and is due when permit is issued)

New Homes:

* In addition to the information required for new buildings, additions and decks, the following is also required

- ❑ Growth Permit Application and Fee (\$100)
- ❑ 4 copies of Septic Permit Application & Plans (NO FAXES) and Fee (\$165) OR Sewer connection permit and fee (\$2,100)
- ❑ Street Entrance Permit (sub-division lots approved in 2000 or later & private ways are exempt)

* Please be aware that structurally complicated buildings must be reviewed by an engineer.

Renovations: *(Alterations which do NOT increase the foot print or volume of the house)*

- ❑ Floor plans showing existing structure and proposed changes
- ❑ Framing cross sections (including sizes of structural members)
 - Structural steel, ridges, beams involving LVL's, or Paralam's, (stamped by engineer)
- ❑ Completed building permit with map and lot (fee is determined by the building inspector and is due when permit is issued)

SOIL DISTURBANCE OF ONE ACRE OR GREATER REQUIRES MAINE CONSTRUCTION GENERAL PERMIT – APPLICATIONS CAN BE GOTTEN THROUGH D.E.P.

All Permit Applications require a non-refundable deposit that will be applied to permit fee.

New Single Family Homes: \$100

All other: \$25

Falmouth Building Inspection Schedule & Permit Requirements

Additional local permits required:

- Electrical
- Plumbing
Fee is \$10 per fixture (\$40 minimum), and 50% of total fixture fees
- Heating - \$25 Fee
- Fireplace or chimney - \$25 Fee per flue
- Street Entrance - \$25 Fee

Electrician's and Plumber's must show current licenses AND have the Map/Lot and Address for property.

Inspections with a check are required:

Please phone the Codes office to schedule an inspection – (781.5253).

- **Allow 2 business days (48 HOURS) advance notice**
- **Have your map & lot and address ready (give this information to sub-contractors)**

- Erosion and sedimentation control measures per Ordinance section 5.39 prior to any soil disturbance**
- Footing (after forms are in, before footings are poured). This is to check soil conditions – required from November 1st through April 30th.
- Foundation (after forms are removed, dam proof, drains, silt protection in place & before backfilling)
- Changes in septic designs require 4 copies of the changed page(s) and a \$25 fee.**
- Septic (scarification)
- Septic (leech bed)
- Plumbing (sub-surface)
- Framing (*AFTER plumbing & electrical are complete with required test on* AND after all framing, fire-stopping, draft-stopping and bracing are in place)
- Insulation and vapor barrier prior to covering, U-Value of windows, AFUE of heating plant
- Fire separation in garage (required only if materials can not be verified at final)
- Electrical Temporary Service (one ground rod minimum)
- Electrical Permanent Service (two ground rods in place and parcel is bonded)
- Final (This inspection must be passed & a Certificate of Occupancy or Completion issued before occupying the space. This is the official end of the building process).
- Phosphorus Control (after phosphorus/erosion control measures have been installed). Applies to Highland Lake overlay district only.

Permit Card must be displayed in a prominent location on the property or inspection will not take place.

Signed plans returned with permit must be kept on site and shall be open to inspection by the building official or his/her authorized representative or inspection will not take place.

Energy Efficiency per Chapter 4 of the Building Code

New homes and additions to existing homes have to meet minimum building energy codes. The amount and performance of the window glass along with the efficiency of the heating unit determines the level of insulation needed. IRC 2009 contains a chart with insulation requirements according to the climate zone. ***This chart can only be used if the maximum glazing area does not exceed 15% and the U-Factor of the glass does not exceed 0.35.*** The following is required for Zone 15:

TABLE N1102.1

SIMPLIFIED PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA MINIMUM REQUIRED THERMAL PERFORMANCE (U-FACTOR AND R-VALUE)

HDD: 7,000-8,499

MINIMUM INSULATION R-VALUE :

Ceilings: R-49

Walls: R-21

Floors: R-21

Basement walls: R-11

Slab perimeter R-value and depth: R-13, 4 ft.

Crawl space walls: R-20

If you are unable to meet the above insulation requirements, 3 options are available at www.energycodes.gov

The three options available to you on the web site are as follows:

1. Pre-defined prescriptive package: fewest options, will require the greatest amount of insulation.
2. Res-check package generator: more options than Pre-defined prescriptive package.
3. Res-check: requires the greatest amount of building information, most accurate method of determining compliance. Downloading is the best option, web can be slow to respond.

In order to generate information on the web site, you will need to know the following:

The Energy code used is 2009IECC, State is Maine, Town is Falmouth.

Percentage of glass (this is the total area of windows and doors divided by the area of the exterior walls that surround the heated space) – *for Pre-defined prescriptive package only.*

- Area of all windows and area of door surrounding the heated space (in square feet on unit size) – *for Res-check package generator and Res-check.*
- The residential U-Value of the glass and the AFUE rating of the heating unit (installer of the heating unit will have this information)

For additions that have less than 500 square feet of heated floor area and doors, windows and skylights not exceeding 40% of the gross wall and roof area, the insulation requirement is figured from prescriptive package #5 for the addition only or for the existing house, with addition, using the available compliance tools.

Note that basements are considered unheated spaces and are required to have either their walls insulated or the floor above them insulated.

FOOTNOTES:

¹ Glazing area is the ratio of the area of the glazing assemblies (including sliding-glass doors, skylights, and basement windows but excluding opaque doors) to the gross wall area, expressed as a percentage. Up to 1% of the total allowed glazing area may be excluded from the U-value requirement. For example, 3 ft² of decorative glass may be excluded from a building design with 300 ft² of glazing area.

² Glazing U-factors must be tested and documented by the manufacturer in accordance with the National Fenestration Rating Council (NFRC) test procedure or taken from the glazing U-factor table in Appendix B. Center-of-glass U-factors cannot be used.

³ The ceiling R-values do not assume a raised or oversized truss construction. If the insulation achieves the full insulation thickness over the plate lines of exterior walls, R-30 insulation may be substituted for R-38 insulation and R-38 insulation may be substituted for R-49 insulation. Ceiling R-values represent the sum of cavity insulation plus insulating sheathing (if used). For ventilated ceilings, insulating sheathing must be placed between the conditioned space and the ventilated portion of the roof.

⁴ Wall R-values represent the sum of the wall cavity insulation plus insulating sheathing (if used). Do not include exterior siding, structural sheathing, and interior drywall. For example, an R-19 requirement could be met *EITHER* by R-19 cavity insulation *OR* R-13 cavity insulation plus R-6 insulating sheathing. Wall requirements apply to wood-frame wall constructions. Metal-frame wall or mass (concrete, masonry, log) wall equivalent R-values can be found in the Prescriptive Packages User's Guide.

⁵ The floor requirements apply to floors over unconditioned spaces (such as unconditioned crawlspaces, basements, or garages). Floors over outside air must meet the ceiling requirements.

⁶ Walls of conditioned basements below uninsulated floors must be insulated from the top of the basement wall to a depth of 10 ft below ground level or to the level of the basement floor, whichever is less. The entire opaque portion of any individual basement wall with an average depth less than 50% below grade must meet the same R-value requirement as above-grade walls. Windows and sliding glass doors of conditioned basements must be included with the other glazing. Basement doors must meet the door U-factor requirement described in Note b.

⁷ The R-value requirements are for unheated slabs. Add an additional R-2 for heated slabs, except in Zone 1 which does not require slab insulation. For packages with a slab insulation requirement, the insulation must extend a total linear distance of at least 24 in. in Zones 2-12 and 48 in. in Zones 13-17. The insulation must extend 1) down from the top of the slab, or 2) down from the top of the slab to the bottom of the slab and then horizontally underneath the slab, or 3) down from the top of the slab to the bottom of the slab and then horizontally away from the slab, with pavement or at least 10 in. of soil covering the horizontal insulation.

⁸ The crawl space wall R-value requirements are for walls of unventilated crawl spaces. The crawl space wall insulation must extend from the top of the wall (including the sill plate) to at least 12 in. below the outside finished grade. If the distance from the outside finished grade to the top of the footing is less than 12 in., the insulation must extend a total vertical plus horizontal distance of 24 in. from the outside finished grade.

⁹ *High Heating* means a furnace AFUE of 90% or more, or a heat pump HSPF of 7.8 or more. *High Cooling* means a SEER of 12 or more. *High Heat/Cool* means both heating and cooling equipment must meet these minimum efficiencies. If you plan to install more than one piece of heating equipment or more than one piece of cooling equipment, the equipment with the lowest efficiency must meet or exceed the efficiency required by the selected package. The following California counties do not qualify for the cooling equipment credit: Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, Orange, San Benito, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Sonoma, and Ventura.

NOTES:

a) Glazing areas and U-factors are maximum acceptable levels. Insulation R-values are minimum acceptable levels. R-value requirements are for insulation only and do not include structural components.

b) Opaque doors in the building envelope must have a U-factor no greater than 0.35. Door U-values must be tested and documented by the manufacturer in accordance with the NFRC test procedure or taken from the door U-factor table in Appendix B. If a door contains glass and an aggregate U-factor rating for that door is not available, include the glass area of the door with your windows and use the opaque door U-factor to determine compliance of the door. One door may be excluded from this requirement (i.e., may have a U-factor greater than 0.35).

c) If a ceiling, wall, floor, basement wall, slab-edge, or crawl space wall component includes two or more areas with different insulation levels, the component complies if the area-weighted average R-value is greater than or equal to the R-value requirement for that component. Glazing or door components comply if the area-weighted average U-factor of all windows or doors is less than or equal to the U-factor requirement (0.35 for doors). Use the *R-Value/U-factor Weighted Average Worksheet* for these computations.

d) Hyphens (--) in any foundation column indicate that the package which contains the hyphens cannot be used with the indicated foundation type.

e) In Zones 1-7, the area-weighted average SHGC value of all glazing cannot exceed 0.4. SHGC values must be determined in accordance with the NFRC test procedure or taken from the default SHGC table in Appendix B.



Prescriptive Package Worksheet

International Energy Conservation Code (IECC)

Enforcement Agency:
Permit #
Checked By
Date

Builder Name _____ Date _____

Builder Address _____

Building Address _____

Zone Number _____ Package Number _____ IECC Edition _____

Submitted By _____ Phone Number _____

PROPOSED

REQUIRED

Glazing Area

$$100 \times \frac{\text{Glazing Area}}{\text{Gross Wall Area}} + \frac{\text{Glazing Area}}{\text{Gross Wall Area}} = \frac{\text{Glazing Area}}{\text{Proposed Glazing Area}} \%$$

_____ %
Maximum Glazing Area

R-Value

Description	Comments	Proposed R-Value
Ceiling		R-
Wall		R-
Floor Over Unconditioned Space		R-
Floor Over Outside Air		R-
Basement Wall		R-
Slab Floor		R-
Crawl Space Wall		R-

Minimum R-Value

R-
R-
R-
R-
R-
R-
R-

U-Factor

Description	Comments	Proposed U-Factor
Glazing		U-
Opaque Door		U-

Maximum U-Factor

U-
U- 0.35

Equipment Efficiency (This section may be left blank if *Normal* is selected on the right.)

Heating _____ AFUE/HSPF _____

Cooling _____ SEER _____
Efficiency _____ Make & Model Number _____

Check One

- Normal
- High Heating
- High Cooling
- High Heating & Cooling

Statement of Compliance: The proposed building design represented in these documents is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the requirements of the International Energy Conservation Code..

Builder/Designer _____ Company Name _____ Date _____