Town of Ayer
Building Department
(978) 772-8214

Minimum documentation and drawings required for Residential Building Permits

Effective 1,Jan.,'99, the following minimum drawings and documentation are required to be submitted with all building permit applications. These requirements apply to all residential construction including but not necessarily limited to, renovations, additions, detached/accessory structures, and new homes.

See separate requirements for commercial construction and projects which are subject to Construction Control under the Mass State Building Code Sixth Edition.

Required documentation:

1. Building Permit Application
   This form must be filled out completely.
   Copies of your builders Construction Supervisors License, Home Improvement Contractor Registration, and a photo ID
   NOTE: If the home owner chooses to use a contractor who does not have a Home Improvement Registration, they must sign the WAIVER OF RIGHTS letter and submit it with the permit application.
   This letter can be obtained at the Building Commissioner's Office.

2. Zoning Board of Appeals
   If a variance or special permit was granted for this project, submit a copy of the decision, with a Certificate of No Appeal certified by the Town Clerk as true copy, along with a copy of the filing with the Registry of Deeds

3. Planning Board
   If a site plan approval was required for this project, submit copies of all drawings, and documents as approved by the Planning Board. These documents must be signed by the Planning Board, or must be referenced in an approval letter. All documents must be certified by the Town Clerk as true copies.

4. Conservation Commission Approvals:
   If your project is within 100 feet of a Wetland or within a designated Floor Plain, it will required approval from the Conservation Commission. Submit a copy of the Order of Conditions, along with all approved drawings.
   All documents must be certified by the Town Clerk as true copies.

5. Flood Plain Construction Approval
   If your project is located within a designated Floor Plain, a Special Permit issued by the Zoning Board of Appeals, and an Order of Conditions issued by the Conservation Commission are required.
   Refer to item No. 2 and 4 for documentation requirements.
   The Building Department should have made a preliminary review of your proposed construction prior to your hearing with the Zoning Board of Appeals. Submit a copy of the Building Department's approval letter.

6. DPW Approvals
   For new homes, and bedroom additions, submit a copy of the Water and Sewer connection permits

7. Board of Health Approvals
   For new homes located in areas of the town not yet serviced by public sewerage, submit a copy of the approved septic plan and a copy of the Septic Permit.
   This permit must be in the owner's name and not more than 2 years old.

8. Well Water
   For new homes located in areas of the town not yet serviced by public water, submit a copy of the well test.
   This test report must be from a Ma. approved testing lab. and not more than 12 months old.
   NOTE: The Coliform Bacterial count on this test must be reported as either ABSENT or 0/ml.
   Any presents of coliform bacteria is not acceptable.

9. Preliminary Plot Plan
   For a new house this drawing must show all property lines, and the proposed house location with dimensions from the house to all property lines.
   For additions and accessory structures, this drawing must show all property lines, the location of the existing house, with dimensions to all lot lines. The location of the new addition or accessory building and dimensions to all lot lines. This drawing must be of sufficient detail and accuracy to determine zoning set-back compliance.
   Further, this drawing must show any wet land areas on, or abutting the property, and any easements.

10. Professional Engineering Certifications
    If your project contains any steel beams, engineered lumber, floor or roof truss systems, vaulted or cathedral ceilings, post 'n' beam framing, or any other unusual construction, Certification by a Ma. licensed professional engineer is required.
    The engineer you select must be qualified if performing the engineering analysis for the materials or system to be certified.
    The Engineering Certification will include, but not be limited to, all design live and dead loads, calculations, free body diagrams, sketches, connections details, and specifications.
    Further the Certification will be site specific. A generic certification will NOT be acceptable.
    The documents submitted will bear an original seal and signature of the engineer of record.
    No documents with photo copied seals and signatures will be accepted.
    No FAX copies will be accepted
    NOTE Ayer is located in Snow Zone 3, (35psf live load.)

11. Modular homes
    The following additional documents are required for building permit applications which are submitted for the construction of Modular Homes:
    a. Copy of the state certification of the Modular Home Company. This must be a current certification document.
    b. Copy of the certification of the installation crew.
    c. A complete set of drawings with state approval stamps.
       The foundation plan cannot be generic, it must be site specific.
       This drawing must show such items, but not limited to: top of foundation, elevation changes, steps in footings, walk out basement areas, reinforcing as may be necessary for site conditions along with engineering certification
       Refer to drawing requirements for additional information.

NOTE: A home owner cannot obtain a building permit to construct their own modular home .

12 Energy Code Compliance

The applicant must demonstrate that the proposed structure is in compliance with the Mass State Building Code energy requirements of Appendix 'J'.

Compliance may be demonstrated in the following forms:

a. Prescriptive package:
   Photo copy the applicable section of Table J5.2.1b of Appendix 'J'.

b. Manual Trade-Off Work Sheet
   There is a blank copy of this work sheet in Appendix 'J'.
   Photo copy work sheet, fill out completely.
      Submit additional supporting data as required to support work sheet calculations.

c. MAScheck software
   The required energy calculations can be performed on this software package.
   Further the software will print out an energy report and appropriate inspection check list.
      Submit additional supporting data as required to support MAScheck input data.

d. Additions to existing structures
   On 15,Jun.,'98 the energy code was amended to accommodate additions as follows:
   1- Additions with less than 40% glazed area
      If other compliance alternatives fail to meet the energy code requirements, then the prescriptive package outlined in Table J1.1.2.3.1 may be used.
      Refer to J1.1.2.3.1. for details.
   2- Additions with greater than 40% glazed area may claim the sun room exemption. If this exemption is used, the OWNER (not any agent) must sign the 'Consumer Information Form'. This form must be submitted with the permit application package.

Required drawings:

The following is a list of the minimum requirements for drawings to be submitted with your application package. This list should not be considered all inclusive. You should submit additional drawings, sections, details, calculations, engineering certifications, etc., as may be necessary to fully demonstrate building code and zoning compliance for your proposed project.

13 General

a. Drawings will be submitted on WHITE BOND paper only, back rolled. DO NOT FOLD Two (2) complete sets of plans required.

b Drawing size to be 11" x 17", 18" x 24" or 24" x 36" only.

c All drawings will be to standard architectural scales as follows:
1/8" = 1'-0" 1/4" = 1'-0" or 1/2" = 1'-0"
Sections and details should be drawn to architectural scales of sufficient size to show required details.

d Drawings must be SITE SPECIFIC.
Generic plans and foundations will not be acceptable.
Refer to foundations for more details.

e No cut 'n' past or photo reductions of plans will be acceptable.

f The submitted plans must be clean and free from stray pencil marks, notations, sketches, etc.

14 Floor Plans

a Dimensions to contain but not limited to:
Overall exterior dimensions, interior room and hallway dimensions, and finished stairway dimensions .

b Identification of primary and secondary egress doorways.

c Identification of the size of all doors, and cased openings.

d Identification of smoke detector locations, and type of units to be installed.
Submit mfg. documentation to confirm compatibility of units.

e Identification of bathroom exhaust fans and exterior discharge location.

f Identification of all tempered or safety glass.

g Identification of all window units by code letter or number.
(ie: 'A', 'B', etc) Windows used for Emergency Egress should be identified as such.

h Provide a window schedule which shows the following:
1 Window identification.
2 Window size, and total square footage.
3 Total square footage of operable sash.

14 Floor Plans (continued)
- 4 Total square footage of room in which the window is located.
- 5 Square footage of natural light (8%) and natural ventilation (4%) which is required for the room.
- 6 Square footage of glazed area and ventilation provided.

i Identification of fire separation between house and attached garage.
j Identification of garage floor surface.
k Identification of guard rail and hand rail finished heights.
l Identification of attic access location and finished opening size.
m Identification of location where framing sections are taken.
n Identification of the size of all door, window and opening headers with spans of greater than 4 foot span.

15 Elevations
- a Elevation drawing of each side of the building. Provide auxiliary elevation views as may be required by the design.
- b All Emergency Egress windows to be identified.
- c Roofing material.
- d Dimension chimney height above roof and above highest point within 10 foot radius.
- e Show dimension of foundation above finished grade.
- f Show approximate finished grades at foundation. These grades must be site specific and not generic.

16 Foundation Plan
- a Dimensions to contain but not limited to: Overall exterior dimensions, column spacing, and finished stairway dimensions.
- b Identification and location of basement windows and size.
- c Identification and location of basement egress door and size.
- d Location and specifications of all anchor bolts.
- e Identify width and depth of foundation footings.
- f Identify size and depth of all column footings.
- g Identify foundation wall thickness.
- h Concrete specifications for foundation and slab. (2500 psi minimum)

17 Floor Framing Plans
- a Dimensions to contain but not limited to: Overall exterior dimensions, and dimensions to main girt beams from exterior or bearing walls.

17 Floor Framing (continued)

b Floor framing specifications, to include but not limited to:

1 Wood species, lumber grade, fiber stress, and modulus of elasticity of framing lumber to be used.

2. Floor joist size, spacing and maximum span required.

3. Identify the required fiber stress, modulus of elasticity, and joist spacing required to achieve the maximum required span.

4. Identify the maximum allowable span for the lumber selected.

18 Roof Framing Plans (simple roof)

a Dimensions to contain but not limited to:

Overall exterior dimensions, and dimensions to locate the ridge.

b Roof framing specifications, to include but not limited to:

1. Wood species, lumber grade, fiber stress, and modulus of elasticity of framing lumber to be used.

2. Rafter size, spacing and maximum span required.

3. Identify the required fiber stress, modulus of elasticity, and joist spacing required to achieve the maximum required span.

4. Identify the maximum allowable span for the lumber selected.

19 Roof Framing Plans (complex roof)

In addition to the information required for a Simple Roof , provide the the following:

a The size of all hips, valleys and ridge boards.

b Ridge specifications, engineering certification and connection details for structural ridge in vaulted ceiling areas.

20 Framing Sections and Details

On simple house frames, framing sections and connection details may be used in lieu of complete framing plans.

All the information required for the framing plans must appear on the section drawings.

a Framing sections and details to include but not limited to the following:

1. Overall dimensions, ceiling height, and floor to floor heights.

2. Show height from average grade to peak of roof.

This dimension is required to demonstrate compliance with height limitation of the Town by-laws.

20 Framing Sections and Details (continued)
3. Foundation specifications, Exterior wall specifications
Floor specifications, and Roof specifications.
Note--Framing sections to clearly show all connection details.

21 Structural specifications
In addition to the structural specifications which are required under Foundation, Floor Framing and Roof framing, provide additional structural specifications as may be needed to demonstrate building code compliance.

Provide engineering certification as outlined in
10 Professional Engineering Certifications (above)
Any unusual structural condition, or as indicated by the Building Commissioner.

All engineering certifications must be site specific.
Generic certifications will not be accepted.
All certifications will bear the original seal and signature of the engineer of record, and will be dated.

This document is intended to aide you in the preparation of your building permit application package. These requirements are to be considered as minimum documentation and not as an all inclusive list. You should provide addition information as need to demonstrate compliance to the Ma. State Building Code, Town by-laws, and regulations from other authorized agencies.

If you have any questions please feel free to call or come-in during scheduled office hours.
Tues. 8:30am to 11:30am and Thurs. 8:30am to 11:30am
(978) 772-8214

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