

Draft stopping is to be not less than ½" sheetrock, 3/8" wood structural panels, 3/8" particleboard or other approved materials adequately supported. Draft stopping is to be installed parallel to the floor framing members unless otherwise approved by the building official.

#### **Sec. R503 Floor Sheathing**

Wood structural panel sheathing is to be in accordance with Table R503.2.1.1 (1) and shall be fastened in accordance with Table R602.3 (1).

#### **Sec. R506 Concrete Floors**

Concrete floors are to be a minimum of 3 ½" thick on prepared base.

Concrete slabs below grade shall be placed over a complying vapor barrier.

#### **Sec. R602 Wall Framing**

Compressible floor covering materials shall not extend beneath walls, partitions or columns, which are fastened to the floor.

Studs shall be a minimum of No. 3, Standard or stud grade lumber. Exception: Bearing studs not supporting floors and non bearing studs may be utility grade lumber provided the studs are spaced in accordance with Table R602.3(5).

The size, height and spacing of studs shall be in accordance with Table R602.3 (5). Exceptions: 1) Utility grade studs shall not be spaced more than 16" o.c., shall not support more than a roof and ceiling and shall not exceed 8' in height for exterior walls and load bearing walls or 10' for interior non load bearing walls. 2) Studs more than 10' in height which are in accordance with Table R602.3.1.

Exterior wall studs are to be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates are to be offset at least 24". A single top plate is permitted in bearing and exterior walls, provided the plate is adequately tied at joints, corners and intersecting walls by a minimum 3" x 6" x .036" thick galvanized steel plate that is nailed to each wall or segment of wall by six 8d nails on each side, provided the rafters or joists are centered over the studs with a tolerance of no more than 1". The top plate may be omitted over lintels that are adequately tied to adjacent wall with steel plates or equivalent as previously described.

Where joists, trusses or rafters are spaced more than 16" o.c. and the bearing studs below are spaced 24" o.c. such members shall bear within 5" of the studs beneath. Exception: If the top plates are two 2" x 6" or two 3" x 4" members.

Studs shall have full bearing on a nominal 2" or larger plate or sill having a width at least equal to the width of the studs.

Interior load bearing walls shall be constructed, framed and fire blocked as specific for exterior walls.

Interior nonbearing walls may be constructed with 2" x 3" studs spaced 24" o.c. or when not a part of braced wall line, 2" x 4" flat studs spaced at 16" o.c.. Interior nonbearing walls shall be capped with at least a single top plate.

Studs in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25% of its width. Studs in nonbearing partitions may be notched not to exceed 40% of a single stud width. Any stud may be bored or drilled, provided the diameter of the resulting hole is no greater than 40% of the stud width, the edge of the hole is no closer than 5/8" to the edge of the stud, and hole is not located in the same section as a cut or notch. A stud may be bored to a diameter not exceeding 60% of its width, provided that such studs located in exterior walls or bearing partitions are doubled and that not more than two successive studs are bored.

Piping or ductwork placed in or partly in an exterior wall or an interior load bearing wall, necessitating cutting of the top plate by more than 50% of its width, a galvanized metal strap 16 gauge by 1 ½" wide shall be fastened to each plate across and to each side of the opening with not less than 8-16d nails at each side. Exception: When the entire side of the notch or cut is covered by wood structural panel sheathing.

Load bearing headers are not required in interior nonbearing walls. A single flat 2" x 4" member may be used as a header in interior nonbearing walls for openings up to 8' in width if the vertical distance to the parallel nailing surface above is not more than 24". For such nonbearing headers, no cripples or blocking are required above the header.

Fire stopping is to be provided to cut off concealed draft openings, both vertical and horizontal and to form an effective fire barrier between stories, and between the top story and the roof space. Fire stopping is required in the following locations: In concealed spaces of stud walls and partitions, vertically at the ceiling and floor levels and horizontally at intervals not exceeding 10'. At interconnections between concealed vertical and horizontal spaces, such as occur at soffits, dropped ceilings and cove ceilings. In concealed spaces between stair stringers at the top and bottom of the run. At openings around vents, pipes and ducts at ceiling and floor level, with an approved material to resist free passage of flame and products of combustion. Fire blocking of cornices of a two family dwelling is required at the line of dwelling unit separation.

Except as provided around vents, pipes and ducts above, fire stopping shall consist of 2" nominal lumber, 23/32" wood structural panels with joints backed with the same material, 3/4" particleboard with joints backed by the same material, 1/2" sheetrock or 1/4" cement based millboard. Batts or blankets of mineral wool or glass fiber installed in such a manner as to be securely retained in place may be used as an acceptable fire block.

Unfaced fiberglass batt insulation used as fire blocking shall fill the entire cross section of the wall cavity to a minimum vertical height of 16". When piping, conduit or similar obstructions are encountered, the insulation shall be packed tightly around the obstruction

Foundation cripple walls are to be framed with studs not less in size than the studding above. When exceeding 4' in height, such walls shall be framed of studs having the size required for an additional story.

#### **Sec. R702.3 Gypsum Board**

Gypsum board shall be screwed a minimum of 12" o.c. on ceilings, 12" o.c. on wall studs which are 24" o.c., 16" o.c. on wall studs which are 16" o.c., and 24" o.c. on walls where adhesive is used.

Water resistant gypsum board cannot be used on ceilings with framing spaced 24" o.c..

Water resistant gypsum board shall not be installed over a vapor retarder in a shower or tub compartment.

#### **Sec. R703 Exterior Covering**

Exterior walls shall provide the building with a weather resistant exterior wall envelope. Siding shall be installed in accordance with Table R703.4.

#### **Sec. R802 Wood Roof Framing**

The roof system is to support a 100psf live snow load.

Allowable spans for ceiling joists are contained in Tables R802.4 (1) and R802.4 (2).

If roof trusses are being used provide engineering drawings for approval of the building inspector before installing the trusses.

Provide plans for the roof system showing sizing, spacing and layout of all components.

Roof trusses shall be braced to prevent rotation and provide lateral stability in accordance with the construction documents for the building and the design drawings for the trusses.

Truss members shall not be cut, notched, drilled, spliced or otherwise altered in any way without the approval of a registered design professional.

Trusses shall be connected to wall plates with approved connectors having a resistance to uplift specified in engineered truss design drawings.

Roof assemblies which are subject to wind uplift pressures of greater than 20psf shall be connected to the wall with connections capable of providing the resistance to uplift required by civil or structural engineering design.

**Sec. R806 Roof Ventilation**

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space. The minimum net free area of ventilation required is 1 to 150 of the area of the space ventilated. If high low vents are used ventilating area can be reduced to 1 to 300.

When eave or cornice vents are used, a minimum of 1" space shall be provided between the insulation and the roof sheathing at the location of the vent.

**Sec. R807 Attic Access**

In buildings with combustible ceiling or roof construction an attic access shall be provided to attic areas that exceed 30 square feet and have a vertical height of 30" or greater.

The attic access shall have a minimum rough opening of 22" x 30" and shall have at least 30" of unobstructed headroom. Attic access openings shall be located in a hallway or other readily accessible location.

**Sec. R905 Roof Coverings**

Roof coverings shall be installed in accordance with this code and the manufacturer's installation instructions.

Asphalt shingles shall be fastened to solidly sheathed decks.

Asphalt shingles shall have self sealing strips or be interlocking, and comply with ASTM D 225 or D 3462.

Asphalt shingles shall have the minimum number of fasteners required by the manufacturer.

Asphalt shingles shall only be used on roof of 2:12 pitch or steeper. On roofs of 2:12 pitch up to 4:12 pitch double underlayment applied in a staggered fashion is required.

An ice barrier consisting of at least two layers of underlayment cemented together or of a self adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from eave's edge and extend to a point at least 24" inside the exterior wall line of the building.

Flashing is required. Flashing against a vertical sidewall shall be by the step flashing method.

**Sec. N1101 Energy Efficiency**

Maximum glazing U factor is .35.

Minimum ceiling insulation R-value is R-49. Exception: where the construction method allows the full R-value to extend over the wall plate, then R-38 is acceptable.

Minimum wall insulation R-value is R-21.

Minimum floor insulation R-value is R-21.

Minimum basement wall insulation R-value is R-19.

Minimum slab perimeter insulation R-value and depth is R-18, 4'.

Minimum crawl space wall insulation R-value is R-20.

Minimum gas furnace efficiency is AFUE 78%.

Minimum split system air conditioner efficiency is 10.0 SEER.

**Sec. M1305 Appliance Access**

30" of working space shall be provided in front of the control side of the appliance.

**Sec. M1701 Combustion Air**

Where the volume of the space in which fuel burning appliances are installed is less than 50 cubic feet per 1000 Btuh, then outside combustion air in the amount determined by the code must be provided.

**Appendix F**

Radon control methods

**Testing**

Pressure test of 80lbs PSI or town water system pressure test will be required prior to any interior sheet rock being applied. All drain, waste, vent, gas and water piping systems must be tested prior to concealment. This test shall be performed simultaneous with the phase three framing inspections on all-new construction or remodel projects. Notes: 1) A pressure reducer valve is required if system pressure exceeds 80lbs. 2) If you have plumbing in a basement it will need to be tested and inspected before the concrete slab is poured.

Water supply shall be tested with water (from town water system) or 80psi of air (if approved by pipe manufacturer).

Drain, waste and vent systems shall be tested with water or air (if approved by pipe manufacturer)

Water Testing- each section shall be filled with water to a point not less than 10' above the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.

Air Test- the portion under test shall be maintained at a gauge pressure of 5 pounds per square inch. This pressure shall be held without introduction of additional air for a period of 15 minutes.

Gas Pipe Systems- shall be tested with air at a gauge pressure of 10 pounds per square inch. This pressure shall be held without introduction of additional air for a period of 10 minutes.

**Inspection Scheduling**

Before scheduling a footing inspection have all horizontal rebar lifted 3" above the ground, have the UFER ground attached properly to the rebar and have the vertical rebar dowels with a 6" bend (or more if required) and any hardware being used in the footing pour on site for inspection.

Before scheduling a stem wall inspection have all foundation vents in place for crawlspace foundations (if being placed in concrete stem wall), all required rebar 1 1/2" clearance from exterior stem wall forms, have any required hardware/hold downs and have properly size anchor bolts on job site.

Before scheduling a Stage 3 Inspection have all structural framing and hardware complete, all rough in electrical, mechanical, fuel gas and plumbing with test pressures applied. Have water supply test with water from town water system or test with air at least 80psi. (See Testing)

Before scheduling a Stage 4 Final Inspection have premium address numbers attached to building. Have all electrical, plumbing, mechanical and fuel gas systems and fixtures operational. Have all coverings, floor coverings, cabinets and trim installed. Have doors and windows in working order. Have stair hand and guard rails complete. Have exterior siding, trim, roofing, decks, stairs and guard rails complete. Have finish grade complete.



*Town of Alpine*

**REQUIRED SETBACKS  
&  
Building Heights**

Any deviations from the requirements listed below will require a plan review and approval of a variance unless a lesser setback is identified in the recorded plat of the approved residential subdivision. For more details and guidelines please refer to the Land Use and Development Code.

**R1**

Front - 25'  
Side - 15'  
Rear - 20'  
Max Bldg. Height -35'  
Max Accessory Bldg. Height-26'

**R2**

Front - 25'  
Side - 15'  
Rear - 20'  
Max Bldg. Height -35'  
Max Accessory Bldg. Height-26'

**MRC**

Front - 25'  
Side – 15'  
Rear - 20'  
Max Bldg. Height -35'

**C1**

Front - 25'  
Side-10'  
Rear – see LUDC  
Max Bldg. Height – 45' not to  
exceed 3 stories



# Town of Alpine

## RESIDENTIAL BUILDING INSPECTION

### SCHEDULE FOR OWNER TO FOLLOW

THIS SHOULD BE DISPLAYED IN A CONSPICUOUS PLACE ON THE PREMISES UNTIL THE CONSTRUCTION IS COMPLETED SO INSPECTIONS ARE NOT MISSED.

FAILURE TO CALL FOR INSPECTIONS WILL RESULT IN FINES ISSUED TO THE OWNER &/OR CONTRACTOR. YOU WILL ALSO BE REQUIRED TO UNCOVER ANY AND ALL ITEMS TO BE INSPECTED PROPERLY AT YOUR OWN EXPENSE.

All details specified in your building plans must be inspected BEFORE they are concealed.

#### STAGE 2:

\*\*\*DO NOT POUR FOUNDATION UNTIL YOU HAVE OBTAINED A CERTIFICATE OF PLACEMENT AND THE TOWN BUILDING INSPECTOR HAS APPROVED IT FOR POURING\*\*\*

**Footing**-*Ufer Ground Cables, Rebar schedule-tied or hung*

**Foundation walls**-*complete and ready for concrete, forms and rebar in place, hold down needs to be present*

**Concrete Slab Floor**-*when underground plumbing, electrical, heating, radon mitigation, etc systems are present*

#### STAGE 3:

\*\*\*DO NOT COVER ANY STRUCTURAL ELEMENTS UNTIL IT HAS BEEN APPROVED\*\*\*

**Framing**

**Roof Load**-*truss plan*

**Rough Plumbing**

**Rough Electrical**

**Rough Heating**

**Rough Stove/Fireplace**

**Pressure Test**-*water, sewer & gas*

**Insulation**

#### STAGE 4:

**Final Electrical**-*when completed*

**Final Plumbing**-*when completed*

**Final Mechanical**-*when completed*

**Final Building**-*handrails, smoke detectors, etc*

PLEASE MAKE SURE YOU HAVE EVERYTHING COMPLETED BEFORE THE INSPECTION DATE. ANY REPEAT INSPECTIONS WILL BE AN ADDITIONAL CHARGE TO THE OWNER/CONTRACTORS.

The Contractor must call Town Office to set up appointments for all inspections.  
Occupancy is PROHIBITED until Certificate of Occupancy Permit is issued.

# **How To Obtain A Building Permit**

## **General Information**

A building permit is the Town of Alpine's official stamp of approval, giving you the go-ahead to do a building project. It is issued only after your plans have been carefully reviewed to ensure the proposed construction is in compliance with the Town's Zoning Regulations and Construction Codes. These regulations were established not to hinder you or befuddle you; rather, they are intended to assure well-planned development and to safeguard health and safety.

The Town of Alpine requires that you obtain a building permit if you erect, enlarge, alter, repair, move, improve, convert, or demolish a building or structure. This includes not only building construction or remodeling, but also electrical, plumbing, or mechanical modifications. Ask the Town Office if you are uncertain about whether your plans require a permit. If work is commenced without a permit, the Building Code requires that an additional investigative fee be charged.

Any permit may be issued to a homeowner. Inspections will not be performed unless the appropriate permits have been obtained.

## **Advantages of a Building Permit**

One of the primary benefits of receiving a building permit is that you receive the services of the Building Official. The inspections approve each phase of the construction process, checking to see that the work is done per the building code, which helps ensure your safety and that of your family and friends.

Secondly, there are legal liabilities that you could face if you don't obtain a permit. Construction work without a permit is illegal and could pose unnecessary complications when you later sell or refinance your home. Furthermore, more and more lending institutions are requiring a final inspection and approval from the Building Official prior to final release of funds.

## Zoning Regulations

Zoning regulations govern how areas of the Town are developed. Designed to prevent haphazard development, they deal with the relationship of a building to the neighborhood as a whole and to the individual piece of property. Dwellings must conform to certain requirements and restrictions such as how far they must be set back from street, front, rear and side property lines, and how much of the lot they are allowed to cover.

The first step in making your plans is to consider the zoning regulations which apply. Check with the Town if you have any questions.

## Construction Regulations

Construction codes deal with the building itself, establishing minimum construction standards designed to safeguard health and safety. Building design for the Town of Alpine shall be in accordance with the accepted engineering practices by a State of Wyoming licensed Civil or Structural Engineer.

**Building Code:** This code specifies structural requirements such as the sizes of rafters and joists, lintels over doors, and headers over windows that you will need to span a particular distance. The building code also identifies foundation requirements, how thick masonry must be, whether pier foundations are permitted, the requirements of footing sizes and other details. The building code also specifies exiting requirements, locations of smoke detectors, egress requirements from bedroom, etcetera. Another building code specification is that the snow load in the Town of Alpine is 100 pounds per square foot live load.

**Plumbing Code:** This code governs the installation of the piping that carries water into a home and the drain, waste and vent system that carries the water out. Fixture placement, connection, and materials permitted are also covered in this code.

**Mechanical Code & Fuel Gas Code:** This code deals with the minimum requirements for the installation of mechanical equipment and gas piping in your home. Furnace location, vent sizing, gas pipe installation and combustion air requirements are some of the issues addressed by this code.

**Electrical Code:** This code governs the installation of the electrical wiring in a home. Spacing and number of receptacles is governed, as well as sizes of wires, location of services and panels, etcetera. In the Town of Alpine, a State Electrical Inspector enforces the Electrical Code.

## **Inspection Information**

Most projects require several inspections as the work progresses. Look at your inspection schedule for the required inspections. These inspections must be requested prior to covering or concealing the work in any way. Call the Town Office if you are in doubt about any requirements or inspections.

Inspections must be called in one working day in advance. Sometimes we can get there sooner, but don't depend on it. The approved plans and inspection record card must be on the job and a street address must be posted for an inspection to be performed. We prefer all residential rough-in inspections (plumbing, mechanical, and framing) to be performed on the same inspection call.

## **Certificate of Occupancy/Completion**

Builders must call the Building Official for final inspection of all projects before occupancy or use of the structure. If your project passes the final inspection, you will be issued a Certificate of Occupancy/Completion.

Occasionally, the Building Official may approve a temporary Certificate of Occupancy for a building which would allow the owner to occupy the building and given a specific amount of time to complete.

## **Work Requiring a Building Permit**

- Building Construction
- Building a Garage
- Building a Deck
- Additions or Remodeling
- Replacing Windows or Doors when dimensions change
- Roofing and Re-roofing increasing the roof load
- Demolition or moving a Building
- Sheds
- Fences
- Retaining Walls
- Other items not listed...please contact the Town Office if you have questions.

## **Work Not Requiring a Building Permit**

- Concrete Flatwork
- Painting, papering and similar finish work

Work in the Town of Alpine right-of-way is not permitted.

## Permit Application Process

To obtain a building permit for new, remodel or addition construction, the following information must be submitted to the Town Office.

1. **Building Permit Application**- This form contains information needed to complete your building permit and assure your project gets an accurate and timely review.
2. **Plans**- These plans should include the following detailed items:
  - Plot/Site Plan
  - Foundation Plan
  - Floor Plans
  - Roof (framing) Plan
  - Elevations
  - Sections + Details

**On residential plans, plumbing and mechanical details are usually shown on the floor plans.**

In the Town of Alpine, certain commercial projects must be reviewed by the State Fire Marshal's office. Please consult with the Building Official if you have questions about who needs to review your plans.

If the information in your application is complete and the project is within the requirements of codes and regulations, it will be reviewed by the Planning & Zoning Commission.

Once your plans are approved by Planning & Zoning you may obtain your building permit. After approval, you or your contractor will receive the building permit, an approved set of plans, and the inspection schedule, all of which must remain on the job site at all times.

A building permit is valid for one year. If building has not commenced 180 days after your building permit is issued it becomes invalid. It is possible to get an extension for one additional year. If project is not completed within 2 years a new application will have to be processed with new fees, filings, meetings, etcetera.

The following pages show sample drawings of the various plans required for residential projects. Please be sure these plans are drawn to scale and are legible.

**NOTE:** The issuance or granting of a permit or approval of plans, specifications and computations shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of the International Building, Residential, Fire, Fuel/Gas, Mechanical or Plumbing Codes; the National Electrical Code; the Town of Alpine Zoning and Sign Code; the Town of Alpine Municipal Codes or any other ordinance of the Town of Alpine. The Permit Applicant and Owner have responsibility for compliance with the applicable Codes and Ordinances.

Additionally, the issuance or granting of a permit or approval of plans, specifications and computations should not be construed to be an approval of any safety aspects of the project. The Building Inspector's duties and responsibilities are limited to those expressly set forth herein and no representations, warranties or guarantees of any kind or nature whatsoever, including those regarding the safety or quality of any construction project, express or implied, are hereby made, or made as the result of any inspection.