THE STATE OF WYOMING

Department Of Fire Prevention & Electrical Safety

DAVE FREUDENTHAL
GOVERNOR

LANNY APPLEGATE
STATE FIRE MARSHAL

If you answer yes to one or more questions please provide plans and construction documents as indicated.

SFM 06/27/06

PLAN REVIEW SUBMITTAL CHECKLIST: CHAPTER II, SECTION 1 SUBMISSION OF PLANS AND SPECIFICATIONS

- ☐ Plans that have been prepared by a professional individual or firm practicing architecture or engineering shall include the name and Wyoming license number of the responsible architect or engineer and bear their seal.
- ☐ Plans submitted for fire protection systems and for fire detection and alarm systems must be prepared by a design professional that is registered to practice in Wyoming.
- ☐ Four complete sets of plans and fours sets of Specifications (if applicable)
- ☐ Provide a complete site plan, drawn to scale, showing the property lines, streets and alleys, proposed building location and any other structures on the site.
- ☐ Provide floor plans either drawn to scale or with all room dimensions.
- ☐ Identify all rooms and their uses.
- ☐ Provide complete mechanical plans
- ☐ Provide exterior elevations.
- ☐ Provide details of all wall types including floors and ceilings.
- ☐ Provide complete electrical plans include: One line diagrams showing feeders, service and panels, panel schedules, location of all electrical equipment, devices, classification of hazardous areas, emergency systems and short circuit current available at the supply terminals at the service equipment.
- ☐ Plan review fee (see attached fee schedule)
- ☐ Postage for the return of one set of approved plans.
- ☐ Completed Project Information Sheet

Note: If the Department of Fire Prevention & Electrical Safety does not receive complete information, the submittal will be returned "NOT APPROVED – INSUFFICIENT INFORMATION".

Please submit plans for review to:

122 W. 25TH STREET • HERSCHLER BLDG - 1 WEST • CHEYENNE, WYOMING 82002
PHONE: (307) 777-7288 • FAX: (307) 777-7119

Town of Alpine
One and Two Family Dwelling
Plan List

This list is a summary of the code requirements for the way homes are typically constructed in the Town of Alpine. Please consult the 2006 International Residential Code book or the Town of Alpine Land Use & Development Code for more details.

Is it Complete?

Site Plan Requirements

_____ Draw plan to standard scale showing property corners, property lines, north arrow, utilities, driveway, existing structures and proposed structures.

_____ Site Plan must comply with the Town of Alpine Zoning Ordinance and other applicable ordinances and regulations.

_____ Property corner markers must be exposed and visible before calling for a Stage 1 and Foundation Inspection.

Sec. R301 Design Criteria

_____ Roof Snow Load 100psf live load, Wind Speed 90mph, Seismic Design Category D2, Weathering Severe, Frost Line Design Depth 36", Termites None to Slight, Decay None to Slight, Winter Design Temp -30F, Ice Shield Underlayment Required Yes, Air Freezing Index 2531, Mean Annual Temp 38F

Sec. R303 Light, Ventilation and Heating

_____ All habitable rooms are to have windows or doors with an area equal to 8% of the room's floor area, with a minimum of ½ that area being openable for ventilation. Show window sizes and the amount of openable area for each room in tabulated form or on building elevations.

_____ There is an exception for using mechanical ventilation and artificial lighting to provide required light and ventilation. If using this exception show mechanical system and distribution (cfm).

_____ Bathrooms and water closet compartments need 3 square feet of window, ½ of which is openable, or exhaust fan rated for 50 cfm intermittent or 20 cfm continuous ventilation.

_____ Stairways and their landings are required to be illuminated. Interior stairways require switching at the top and bottom.

_____ The heating system must be capable of maintaining 68F at a point 3' above the floor in all habitable rooms.

_____ The under floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement or cellar) shall be provided with ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot for each 150 square feet of under floor space area. One such ventilation opening shall be within 3' of each corner of said building. Exception: The total area of ventilation openings may be reduced to 1/1500 of under floor area where the ground surface is treated with an approved vapor retarder material (6mil plastic) and the required openings are placed so as to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of 1.0 cfm for each 50 square feet of under floor space floor area and ground surface is covered with an approved vapor retarder material (6 mil plastic).

Sec. R304 Minimum Room Areas

_____ Every Dwelling unit is required to have one habitable room that has not less than 120 square feet of gross floor area.

_____ Other habitable rooms shall have an area of not less than 70 square feet and shall not have horizontal dimensions of less than 7'. Exception: kitchens

_____ Portions of a room with a sloping ceiling less than 5' or a furred ceiling measuring less than 7' shall not be considered as contributing to the minimum required habitable area for that room.

Sec. R305 Ceiling Height

_____ Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms, and basements shall have a ceiling height of not less than 7'. Exception: beams and girders spaced not less than 4' o.c. may project not more than 6" below required ceiling height. For the other exceptions please see the code. (Note the 7' applies to soffited areas in finished basements.)

Sec. R306 Sanitation

_____ Every dwelling unit shall be provided with a kitchen area and a sink in that area.

_____ All plumbing fixtures shall be connected to an approved water supply. Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water.

_____ Shower and tub/shower control valves shall be of the pressure balance or thermostatic mixture type. (ASSE 1016) The high limit stops shall be set to 120F maximum.

_____ Plumbing fixtures with flood rims located below the elevation of the next upstream manhole of the public sewer shall discharge through an approved backwater valve (and only those fixtures).

Sec. R308 Glazing (the following locations need safety glazing)

_____ Glazing in doors and enclosures for hot tubs, saunas, steam rooms, bathtubs and shower; Glazing in any part of the building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60" above the floor or walking surface.

_____ Glazing adjacent to doors when the nearest edge is within a 24" arc of the door in the closed position and whose bottom edge is less than 60" above the floor.

_____ Glazing meeting all the following conditions, exposed area of an individual pane greater than 9 square feet, bottom edge less than 18" above the floor, top edge greater than 36" above the floor and one or more walking surfaces within 36" horizontally of the glazing.

_____ All glazing in railings.

_____ Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60" above the walking surface and within 60" horizontally of the water's edge.

_____ Glazing adjacent to stairways, landings and ramps within 36" horizontally of a walking surface when the exposed surface of the glass is less than 60" above the walking surface.

_____ Glazing adjacent to stairways within 60" horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glass is less than 60" above the nose of the tread.

Sec. R309 Garages and Carports

_____ Openings from the garage to the dwelling unit shall be protected by a solid wood door not less than 1 3/8" in thickness, a solid or honeycomb steel door not less than 1 3/8" thick or a 20 minute rated fire door.

_____ Ducts in the garage and duct penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum 26 gage steel and have no openings.

_____ The garage shall be separated from the residence and its attic area by not less than 5/8" type X sheetrock applied to the garage side. Garages beneath habitable room shall be separated from the habitable room by 5/8" type X sheetrock. Where the separation is a floor ceiling assembly, the structure supporting the separation shall also be protected by not less than 5/8" type X sheetrock.

_____ Garage floor surfaces shall be of concrete or approved substitute. Garage floor shall slope to a drain or toward the main vehicle entry doorway.

_____ Carports shall be open on at least two sides. Carport floor surfaces shall be concrete or asphalt.

Sec. R310 Emergency Escape and Rescue Openings

_____ Emergency escape and rescue openings shall comply with all the following dimensions. Maximum sill height-44"; Minimum opening area-5.7 square feet; (Grade floor openings 5 square feet) Minimum opening height-24"; Minimum opening width-20"

_____ Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. For basements with bedrooms requiring window wells the minimum horizontal area of the window well shall be 9 square feet with a minimum horizontal projection and width of 36". The area of the window well shall allow the emergency escape and rescue opening to be fully opened. Window wells with a vertical depth greater than 44" shall be equipped with a permanently affixed ladder or steps (the ladder or steps may encroach a maximum of 6" into the required dimension of the window well) usable with the window in the fully opened position. Ladders or rungs shall have an inside width of at least 12", shall project at least 3" from the wall and shall be spaced not more than 18" on center vertically for the full height of the window well.

Sec. R311 Means of Egress

_____ Each dwelling unit shall have not less than 1 exit door. This door must provide direct access to the exterior without requiring travel through a garage.

_____ The required exit door shall be a side-hinged door not less than 3' in width and not less than 6' 8" in height.

_____ There shall be a floor or landing on each side of an exterior door. The floor or landing shall not be more than 1.5" lower than the top of the threshold. Exception: The landing at an exterior doorway shall not be more than 7 ¾" below the top of the threshold provided the door does not swing over the landing.

_____ The width of each landing shall not be less than the door or stairway served. The landing shall be at least 36" measured in the direction of travel.

_____ All egress doors shall be readily openable from the side from which egress is to be made without the use of a key or special knowledge or effort.

_____ The minimum width of a hallway shall not be less than 3'.

_____ The minimum width of a stairway is 3'. All stairways shall have headroom of not less than 6'8" measured vertically from the slope plan adjoining the tread nosing or from the floor surface of the landing or platform.

_____ The maximum stair riser height is 7 ¾". The minimum stair tread depth is 10". The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. Rise or tread depth shall not vary more than 3/8" within any flight of stairs. This includes exterior.

_____ There shall be a floor or landing at the top and bottom of each stairway. Exception: a floor or landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs.

_____ Enclosed accessible space under stairs shall have walls, under-stair surfaces and any soffits protected on the enclosed side with ½" sheetrock.

_____ Handrails shall be provided on at least one side of each continuous run of treads or flight with 4 or more risers. Handrails shall be continuous for the full length of the flight and the handrail ends shall be returned or terminate in newel posts. This includes exterior.

_____ Handrail height shall be not less than 34" and not more than 38". All stairs shall be illuminated. This includes exterior.

_____ Handrails adjacent to a wall shall have a space of not less than 1 ½" between the wall and the handrail. Handrails with a circular cross section shall have a diameter of at least 1 ¼" and not greater than 2". Handrails with a non-circular profile shall have a perimeter dimensions of at least 4" and not greater than 6 ¼" with a maximum cross section of 2 ¼". This includes exterior.

Sec. R312 Guards

_____ Guardrails for porches, decks, balconies or floor surfaces more than 30" above floor or grade shall have guardrails at least 36" high and for the open side of stairs the guardrail must be at least 34".

_____ Guardrails are to have intermediate members such that passage of a 4" diameter sphere is not possible.

Sec. R313 Smoke Alarms

_____ Smoke detectors are required in the following locations: in each sleeping room, outside each sleeping area in the immediate vicinity of the bedrooms and on each additional story.

_____ Smoke detectors shall be hardwired, interconnected and have battery backup.

Sec R314 Foam Plastic

_____ Foam plastic shall have a maximum flame-spread of 75 and a maximum smoke developed rating of 450 when tested to ASTM E 84.

_____ Foam plastic shall be separated from the interior of the building by a minimum of ½" sheetrock or approved equivalent.

Sec. R315 Flame Spread

_____ Wall and ceiling finishes shall have a maximum flame-spread classification of 200 and a max smoke density of 450.

Sec. R316 Insulation

_____ Exposed insulation materials, including facing materials, installed in a floor-ceiling, roof-ceiling, crawl space, attic or wall assembly shall have a maximum flame spread of 25 and a maximum smoke developed rating of 450.

Sec. R317 Dwelling Unit Separation

_____ Dwelling units in a duplex are to be separated from each other by wall and/or floor assemblies of not less than one hour, fire resistive construction. The assembly is to extend to and be tight against the exterior wall and wall assemblies are to extend to the under side of the roof sheathing. When a floor assembly is required to be fire resistive the supporting construction of the assembly is required to have an equal or greater fire resistive rating.

_____ Townhouses are to be considered as separate buildings and have adjoining separate walls as required for property line walls for single family dwellings (one-hour). A common two hour separation wall, not containing plumbing, mechanical equipment, ducts or vents is also acceptable. The common wall is to be continuous from the foundation to the underside of the roof sheathing for the full length of the common wall. The common wall is to have a parapet 30" above the roof. A parapet is not required if the roof covering is a minimum Class C and the roof sheathing is non-combustible or approved fire retardant treated wood for a distance of 4' on each side of the wall or if one layer of 5/8" type X gypsum board is installed directly beneath the roof sheathing for a distance of 4' on each side of the wall.

_____ Townhouse units are to be structurally independent unless a two hour common wall is used.

Sec. R319 Protection Against Decay

_____ Decay resistant wood is required in the following locations: Wood joists or the bottom of a wood structural floor less than 18" from exposed ground. Wood girders closer than 12" to exposed ground. Sill plates less than 8" from exposed ground. Sills and sleepers on a concrete slab that is in direct contact with the ground, unless separated from such slab by an impervious moisture barrier. The ends of wood girders entering an exterior masonry or concrete wall having a clearance of less than ½" on tops, sides, and ends. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6" from the ground.

_____ Fasteners (bearing plate washers, nails that attach floor joists, nails through shear wall into treated plate and any hardware) for pressure preservative and fire retardant treated wood shall be of hot dipped galvanized steel, stainless steel, silicone bronze or copper. Exception: ½" diameter or greater steel bolts.

Sec. R321 Site Address

_____ Street numbers shall be posted so as to be visible from the street.

Sec R401 Foundations

_____ Basement slabs and interior slabs, except garage slabs, concrete shall have minimum specified compressive strength of 2500 psi.

_____ Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather shall have a minimum specified compressive strength of 3000 psi and be air entrained between 5 and 7 percent.

_____ Porches, carport slabs, steps exposed to the weather and garage floor slabs, concrete shall have a minimum specified strength of 3500 psi and be air entrained 5-7%.

_____ Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6" within the first 10'. Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6" of fall within 10', drains or swales shall be provided to ensure drainage away from the structure.

Sec R403 Footings

_____ All footings shall be at least 36" below grade. Exceptions: 1) Free-standing accessory structures with an area of 200 square feet or less and an eave height of 10' or less. 2) Decks not supported by a dwelling.

_____ Footings shall be Civil or Structural Engineered.

_____ All exterior footings shall be placed at least 12" below the undisturbed ground.

_____ Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by extending below the frost line or another accepted approved method. Decks supported by a dwelling require footings to be below the frost line.

_____ Interior footings supporting bearing or braced walls and cast monolithically with a slab on grade shall extend to a depth of not less than 18" below the top of slab.

_____ The top surface of footings shall be level. The bottom surface of footings shall not have a slope exceeding one unit vertical in ten units horizontal (10% slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footings or where the slope of the bottom surface of the footings will exceed one unit vertical in ten units horizontal (10% slope).

_____ The wood sole plate at exterior walls on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6' on center for a single story dwelling. The maximum anchor bolt spacing shall be 4' for buildings over two stories in height. There shall be a minimum of two bolts per plate section with one bolt not located more than 12" or less than seven bolts diameters from each end of the plate section. Bolts shall be at least ½ in diameter and shall extend a minimum of 7" into masonry or concrete. Anchor bolts shall be a minimum of 10" long and be on job site prior to stem wall or slab pour that requires foundation anchorage. 3" x 3" x ¼" galvanized bearing plates are required to fasten treated sill plates to foundation.

_____ On graded sites, the top of any exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved drainage device a minimum of 12" plus 2%. Alternate elevations are permitted subject to the approval of the building official, provided it can demonstrate that required drainage to the point of discharge and away from the structure is provided at all locations on the site.

Sec. R404 Foundation Walls

_____ All foundation walls shall be Civil or Structural Engineered.

Sec. R406 Foundation Damproofing

_____ Foundation walls that retain earth and enclose habitable or useable spaces located below grade shall be damproofed with a bituminous coating.

Sec 408 Under-Floor Spaces

_____ Crawl spaces are to be provided with a minimum 18" x 24" access opening. Exception: an access opening through a perimeter wall shall be 16" x 24" minimum.

_____ The under floor grade shall be cleaned of all vegetation, organic material and construction debris. All wood concrete forms shall be removed.

Sec. R502 Floor Framing

_____ Floor joists are to be sized in accordance with Tables R502.3.1 (1) and R502.3.1 (2), if standard lumber, or for manufactured floor systems as per the manufacturers specifications. Show the size, spacing, span, layout and type of floor joists to be used.

_____ Cantilevers are to be sized in accordance with Tables R502.3.3 (1) and R502.3.3 (2), if standard lumber, or for manufactured floor systems as per the manufactures specifications.

_____ Show the location, size, span, support, connections and type of all floor beams.

_____ The ends of standard wood joists, beams or girders shall have not less than 1 ½" of bearing on wood or metal and not less than 3" of bearing on concrete or masonry. Approved joist hangers may be used as an alternative.

_____ Floor systems having joists framing from opposite sides over a bearing support are to be tied together by lapping the joists at least 3" and face nailing with at least 3 10d nails minimum. A wood or metal splice with equal strength is also allowed.

_____ Joists framing into the side of a wood girder are to be supported by approved framing anchors or on ledger strips not less than nominal 2" x 2".

_____ Joists are to be supported laterally at the ends by full-depth solid blocking not less than 2" in thickness; or by attachment to a header, band or rim joist.

_____ Joists greater than 2" x 12" (nominal) are to be supported laterally by solid blocking, diagonal bridging or a continuous 1" x 3" strip nailed across the bottom of joists perpendicular to joists at intervals not exceeding 8'.

_____ Notches in the top or bottom of standard wood joists are not to exceed 1/6 of the depth of the joist and are not to be located in the middle 1/3 of the span. Where joists are notched on the ends for a ledger, the notch is not to exceed ¼ the joist depth. Cantilevered joists shall not be notched unless the reduced section properties and lumber defects are considered in the design.

_____ Holes drilled or bored in joists are not to be within 2" of the top or bottom of joists and diameter is not to exceed 1/3 depth of the joist.

_____ Cuts, notches and holes bored in trusses, laminated veneer lumber, glue-laminated members or I-joists are not permitted unless the effects of such penetrations are specifically considered in the design.

_____ Floor framing is to be nailed in accordance with Table R602.3 (1).

_____ Post and beam or girder construction needs to have positive connection to prevent uplift and lateral displacement.

_____ Provide details for all floor construction including decks.

_____ Where there is usable space above and below the concealed space of a floor/ceiling assembly draft stops are to be installed so that the area of the concealed space does not exceed 1000 square feet. The draft stopping is to divide he concealed space into approximately equal areas. Draft stopping is to be provided in floor ceiling assemblies when the ceiling is suspended under the floor framing and when the floor framing is constructed of truss type, open web or perforated members.

_____ 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% f 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 by 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, ¾" particleboard with joints backed by the same material, ½" sheetrock or ¼" 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.