



RESIDENTIAL ONE- AND TWO-FAMILY DWELLING PLAN SUBMITTAL REQUIREMENTS FOR NEW CONSTRUCTION, ADDITIONS AND REMODEL PROJECTS

See "Electronic Submittal Requirements" for digital submittal guidelines.
E-mail application and plan(s) to citybuilding@helenamt.gov.

CURRENT APPLICABLE CODES:

2021 International Residential Code (IRC), Ch. 1-10 and Ch. 15

2020 National Electrical Code (NEC)

2021 International Energy Conservation Code (IECC)

2021 Uniform Plumbing Code (UPC)

2021 International Mechanical Code (IMC) and IRC, Chapter 15, Exhaust Systems is adopted as an alternative to the International Mechanical Code for exhaust system only.

- Codes have been amended and modified by State of Montana Administrative Rules (ARM's), Title 24, Chapter 301. Full text is available at www.mt.gov.
- Indicate compliance with City of Helena City Code for all land use, infrastructure, zoning rules and regulations. Full text is available at www.helenamt.gov

The plans must be drawn neatly to scale and sufficiently detailed to indicate the nature of the work proposed by showing the applicable items listed below. Suggested scale to be used is $\frac{1}{4}$ inch = 1 foot and not less than $\frac{1}{8}$ inch = 1 foot, except for the site plan which may be adjusted in scale to the size of the property and the project, but not less than 1 inch = 30 feet.

PLAN SUBMITTAL DOCUMENTS shall consist of the following:

- ☐ PERMIT APPLICATION must accompany all submittals for plan review and permit
- ☐ COMPLETE BUILDING CONSTRUCTION PLANS INCLUDING SITE PLAN;
- ☐ FLOOR PLAN IDENTIFYING LATERAL BRACING FOR WIND & SEISMIC LOADS OR LATERAL ANALYSIS PERPARED BY MONTANA LICENSED STRUCTURAL ENGINEER;
- ☐ ENGINEERED FLOOR AND/OR ROOF TRUSS DATA SHEETS;
- ☐ AND A COMPLETED COPY OF THE "RESIDENTIAL CODE SUMMARY CHECKLIST" Copy of this form is available through the Building Division office or on the City's web site at www.helenamt.gov.

1. **SITE PLAN shall include:** (see the attached Site Plan example)

- Existing address or official address assignment letter.
- All property dimensions, total lot square foot area and zoning district designation and North arrow.
- Names and locations of adjacent streets, alleys, parks and right-of-ways.
- Location and setback dimensions for all new and existing structures.
- Total area square footage of all new and existing structures on the site including sheds, detached structures and covered porches.
- Water and sewer service lines and sizes, water meter size, gas, electric, telephone and cable service line locations. If new service line taps are to be made, provide tap sizes. See **Helena City Code for water and sewer regulations, Title 6, Chapters 2 and 3.**
- Any site encumbrances – access, drainage and utility easements, encroachments or covenants.
- Boulevard type sidewalk and landscaping requirements that complies with **Helena City Code, Title 7, Chapter 4 and Title 7, Chapter 10.** Any new sidewalks, ADA ramps and/or drive approaches within city right-of-ways are ADA compliant. Do not exceed a 2% cross slope along any traveled way or path.
- New or existing vehicular access points to the property meeting the construction standards of curb cuts and driveway approaches(s) details that complies with **Helena City Code, Title 7, Chapter 5**
- Location to nearest fire hydrant – show or provide distance reference in feet.
- Site topography with grade elevations at site corners, building corners and finish floor levels and structure height information from elevations.
- Storm water drainage improvements or modifications. (Storm water shall not affect adjacent lots. Final site grading must allow all storm water to pass thru site without negatively affecting adjacent lots.
- Required off street parking that complies with **Helena City Code, Title 11, Chapter 22**

2. FOUNDATION PLAN

- Show complete foundation layout including, dimensions, pier and footing locations.
- Location, type and spacing of anchor bolts, hold-down devices and post bases.
- Footing detail(s) with cross sectional view showing, depth, width & reinforcement.
- Location of Ufer (concrete encased grounding electrode) in footing on plan view.

3. FLOOR PLANS

- Room use, dimensions and square footage of each, total of each level and garage (including crawlspace, porches, patios and decks)
- Window sizes, types, locations and net free openable area
- Door sizes and locations
- Crawlspace and attic access size and location
- Garage and/or dwelling unit separation walls and draftstop locations
- Braced wall (shear wall) location, method, quantity (linear footage) and fastening requirements.

4. FLOOR FRAMING PLAN FOR EACH LEVEL

- Floor joist details including sizes, type, lumber grades, span and spacing of members
- Header, girder and beam sizes, span and location and post sizes and connection requirements
- Thickness and type of subflooring

5. ANALYSIS FOR LATERAL BRACING

- Prescriptive path as permitted in Section R602.10 or
- Lateral analysis and connection requirements designed and stamped by Structural Engineer

6. BUILDING SECTION AND FRAMING DETAILS

- Sectional drawings showing: Framing member sizes, spacing of framing members, beams, bracing, post and beam connections, etc.
- Floor to floor height dimension (including crawlspace and attic height) – coordinate with site plan and truss data to determine overall building height.

7. ROOF FRAMING

For engineered truss roof system:

- Truss engineering from manufacturer including types, span, pitch, spacing, bearing locations and any specific framing or anchoring details.
- Rake or outrigger and eave edge detail, roof sheathing and underlayment material
- Attic ventilation type, location and calculated quantity

For conventionally framed roof:

- Ceiling joists and rafter, sizes spans, and spacing
- Header sizes, spans, location, & lumber grade
- Outrigger sizes, location, spans, and spacing, roof sheathing and underlayment material
- Attic ventilation type, location and calculated quantity

8. EXTERIOR BUILDING ELEVATIONS

- Provide building elevation of each side showing type of wall covering, window and door locations, floor-to-floor height and over all building height from grade level.

9. FIREPLACE DETAILS

- If wood stove or fireplace insert is used, provide installation manual (UL listed unit required)
- Combustion air intake to outside air – source of outside air for combustion.

10. ENERGY CONSERVATION (2018 International Energy Conservation Code)

- Show compliance with IECC energy code. See also State of Montana Department of Environmental Quality – “Residential Building Energy Code Summary”.
- Or, provide a copy of ResCheck analysis - <https://www.energycodes.gov/rescheck>

11. PLUMBING, MECHANICAL AND ELECTRICAL PLAN

- Provide schematic layout of lights, ceiling fans, outlets and switches
- Indicate location of main electrical service, UFER ground and all sub-panels
- Location of smoke detectors and carbon monoxide detectors
- Provide mechanical equipment information and water heater indicating size, type and location of units.
- Indicate location of all plumbing fixtures and hose bibs. Provide full kitchen, bathroom and laundry room layouts.

THE ABOVE INFORMATION MUST BE SUBMITTED FOR YOUR PLANS TO BE CONSIDERED COMPLETE. THE INFORMATION MUST BE PROVIDED IN ORDER TO PROCESS YOUR PLANS IN A TIMELY AND CONSISTENT MANNER. INCOMPLETE SUBMITTALS WILL BE RETURNED TO THE APPLICANT UN-REVIEWED.