



**CITY OF DES MOINES  
PLANNING BUILDING AND  
PUBLIC WORKS DEPARTMENT**

**RESIDENTIAL  
MINIMUM DRAWING  
REQUIREMENTS  
I-001**

21630 11th Avenue South, Ste D • Des Moines, Washington 98198 • Tel: (206) 870-7576 Fax: (206) 870-6544

**RESIDENTIAL NEW CONSTRUCTION AND ADDITIONS  
MINIMUM REQUIREMENTS FOR CONSTRUCTION DRAWINGS**

Plans are required to have the following minimum information to be accepted for plan check. Plans shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed shall conform to the provisions of the adopted Uniform Codes and ordinances.

Plan sheets must be 11" x 17" , 18" x 24" , 24" x 36" , or 30" x 42". All sheets shall be the same size. Plans shall be drawn in indelible ink. **(Plan sheets that are cut and pasted, taped, or that have been altered by any means such as pen, pencil, marking pen, etc, will not be accepted for plan check.)**

**SITE PLAN:**

- Scale, North Arrow. Maximum scale is 1" = 40' (preferred scale is 1" = 20' or 1" = 40')
- Dimensions of lot, street name, use, and vicinity map
- Existing and proposed structures labeled with dimensions, as well as distance from property lines
- Show with dashed lines any existing structures to be removed or demolished.
- Location of utilities (water, sewer, gas, electricity). \*new construction and additions only
- Site contours and drainage (existing in dashed lines, new in solid lines)
- Width of driveway and description of paving materials
- Finished floor elevations and elevation readings at each corner of the lot.

**FOUNDATION PLAN:**

- Scale and North Arrow (preferred scale is 1/4" = 1 foot)
- Outline of perimeter foundation, concrete slabs, patios, etc **with dimensions**
- Location and size of exterior and interior bearing footings/foundations
- Interior pier locations and sizes **with dimensions**
- Location and size of required reinforcing steel.
- Location, size, embedment, and spacing of anchor bolts, hold downs (if required) and post to footing connections
- Location and sizes of foundation vents and crawl space access
- Construction details of any unusual construction practice
- Stamped engineering calculations are required for foundation/retaining walls over 4'

**FLOOR PLAN (Show all rooms)**

- Scale (preferred scale is 1/4" = 1 ft).
- Use and size of each room.

- Window and door locations and size.
- Header sizes over openings.
- Beam locations, materials, spacing and sizes.
- Floor joist sizes, directions of run, spans and spacing (in lieu of separate framing plans).
- Ceiling joists, floor joists, trusses, and roof rafter sizes, directions of run, spans and spacing (in lieu of separate framing plans).
- Location of plumbing/heating fixtures and equipment.
- Shear wall location.
- Show locations for all switches, outlets, receptacles, and electrical appliances.

### **FRAMING PLANS**

**INFORMATION ASKED FOR HERE IS REQUIRED, WHETHER OR NOT SEPARATE FRAMING PLANS ARE SUBMITTED.**

- Size, lumber species, grade, spacing and spans of all framing members. Specify panel identification index for sheathing.
- Clearly show bearing/shear walls and specify nailing schedule.
- Show materials and method of connection of all posts to beams.
- Call out any special connection method in detail and clearly show how the building is held together.
- Designs out of the scope of the conventional framing provisions of the IRC shall be designed and stamped by a Washington State Registered Professional Engineer.
- Show lateral bracing in compliance with IRC R602.10, or provide details on the plans, designed and stamped by a structural engineer. The engineer's analysis of seismic and/or wind loads must accompany the design. Plans shall detail all building connections for all designed lateral load connections.
- Provide engineered truss drawings. These should be stamped and signed by a registered design professional and should include a truss layout plan and note how trusses are to be laterally braced.
- Provide flashing details for all exterior openings.

### **ELEVATIONS**

**ELEVATIONS ARE REQUIRED FOR ALL PROPOSED STRUCTURES WITH A ROOF OR PARTIAL COVER.**

- Show height from finish grade to: 1) finished floor; 2) top plate/ceiling; 3) highest point of structure.
- Specify all finished materials to be utilized in construction.
- Show all doors and windows (distinguish between openable and fixed; single glazed and dual glazed). Provide manufacturers installation and weather proofing details.
- Specify roof pitch and material. Chimney in relation to roof.

### **BUILDING CROSS SECTIONS**

**Show sections of structure that clarify in detail the typical conditions and describe otherwise hidden conditions.**

- Complete detailed cross sections of footing/foundations. Show backfill to top of interior footings.
- Mud sill and anchorage material (cedar or pressure treated).
- Post to beam connections.
- Floor construction--show required clearances of earth to wood or specify treated lumber.
- Wall construction including exterior and interior wall covering and insulation.
- Ceiling construction (size and spacing of joists or pre-manufactured truss spacing) and insulation.
- Components of roof covering.
- Show compliance with ventilation requirements for attic space.
- Full height section through fireplace and chimney, including reinforcing materials.
- Full height section through stairways including dimensions of riser and tread framing materials; riser height, tread width; handrail height above tread nosing; and clearance to ceiling above the stairs measured from a line drawn at and parallel to tread nosings and structural information.

## **ENERGY/VENTILATION/NOISE LEVEL REDUCTION**

### **INDICATE COMPLIANCE WITH ENERGY CODE**

- Indicate compliance with energy code. Specify selected design approach: 1) Component Performance; b) Systems Analysis; or c) Prescriptive.
- Provide documentation verifying compliance.
- Submittals for Energy Code compliance must include the model numbers, frame type and U-values for windows. This information must appear in the Compliance form for Prescriptive compliance or as part of a window schedule included in the plans for Component Performance or Systems Analysis compliance.
- Show compliance with light and ventilation requirement.
- Show compliance with sound transmission requirements of 35 dBA.

## **GENERAL**

- 110-volt smoke detectors shall be shown in each sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area.
- The open sides of stairways, landings, balconies or porches, which are more than 30 inches above grade or floor below, shall be shown to have a 36" guardrail with intermediate rails or an ornamental pattern such that a sphere 4 inches in diameter cannot pass through.
- Glazing in doors and enclosures for bathtubs and showers and in any portion of a building wall enclosing these compartments shall be specified as safety glazing where the bottom exposed edge of the glazing is less than 60 inches above a standing surface and drain inlet.